



Chameleon Information Management Services Limited

INFOFLEX v5 DESIGN MANAGEMENT 2 USER GUIDE

**DATA VIEWS
ARCHIVING and DELETING
ACTIONS
SUBJECT SEARCH QUERIES,
Introduction to PANEL LAYOUTS, BUTTON ACTIONS**

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May 2014	7.8	5.60.0200	JW	1.1 Update to name of data view to create Data view definition properties – addition of default filter and subject summary screen URL

Design management documentation

The following documents relating to design management functionality are also available:

Design management 1
Studies User Guide
InfoFlex Functions and Expressions User Guide
Panel button actions
Functionality for NHS numbers
Write back actions
Screen designer
Updating calculated items
Spell Checking

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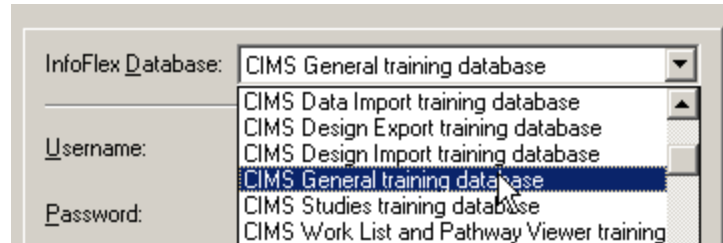
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1 DEFINING DATA VIEWS

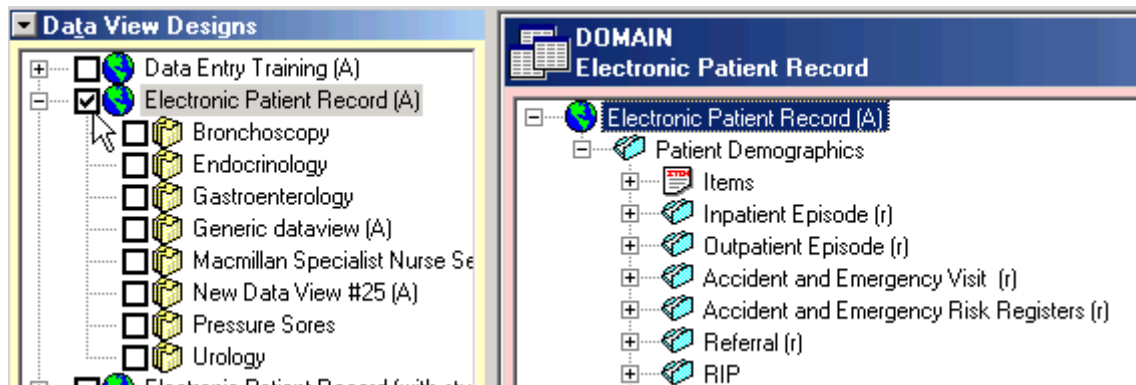
1.1 Defining a Data View

Log into the **CIMS General training database**.

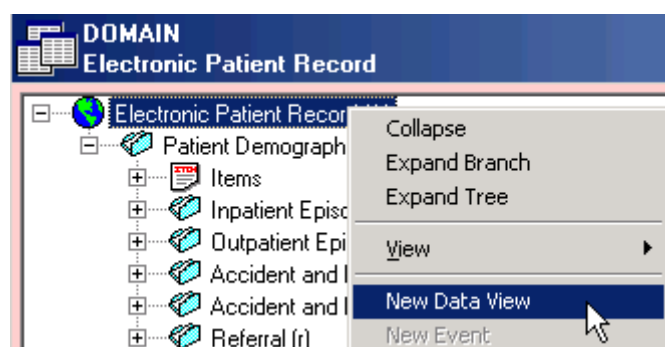


The Username is **training** and the Password is **training**.

Go to the **Design Management** module and display the **Electronic Patient Record** domain.



Right click the **Electronic Patient Record** and choose **New Data View**.



A **Create new definition** window is displayed.

The Details section of the window describes what is being created.

The Properties section of the window displays the properties from the **General** tab of the data view definition.

Give the data view the name **Colonoscopy 2**. Set other properties if you wish.

Event Locking Level	This allows events to be locked to prevent two users from changing the same subject's record as the same time.
Show documents?	This allows you to define if documents are available to users in the data view.
Delete Hidden Events?	If set to Yes , the user is allowed to delete an event even though there may be child events and documents attached that are not visible in the current data view. If set to No , the user is prevented from deleting an event that has child events and documents that are not visible in the current data view.
Secure Entry Mode	This function, if set to Yes , requires the user to enter their username and password every time data is saved.
Spell Check Behaviour	Controls the behaviour in Data Entry of text and memo items that have their Advanced tab Spell Check property set to Yes . When set to Indicate , all misspelt words (in items where spelling is switched on) have squiggles underneath and the right click menu showing suggested corrections is available. When set to Prompt , the behaviour described above for Indicate happens and in addition the spell check dialog opens automatically on exiting the item if there are misspelt words (in items where spelling is switched on). When set to None , no squiggles are shown and the right click menu is not available, even if individual items have spell checking switched on. However the spell check dialog can still be opened from text and memo items by pressing the new toolbar button or ctrl F7.
Preload Definitions	When the value is Yes , this will load all the definitions for the data view once when first entering the data view (i.e. event views, events, panels, panel items, items, document views, documents, document items), rather than repeatedly loading them as they are required. So it can speed up moving from panel to panel or event to event.
Default Filter Date Range	Sets the filter which is applied to the Subject Overview tree when the data view is first loaded in Data entry. Default is None .
Subject Summary URL	The URL of a specially-configured web application. This would use InfoFlex data portal widgets to show a subject summary screen. If a URL is specified here, the subject summary screen will be shown instead of the Data Entry screen when a subject is first selected in Data Entry. If no URL is specified here, Data Entry behaviour is unchanged.

There is a wizard style mechanism to continue.

The **Create** button creates the data view and displays it on the main screen.

The **Edit** button creates the data view and opens the data view definition (see section 7)

however, it is best to wait until more events and items have been created before editing any more properties.

The **Next** button allows you to proceed directly to creating an event view.

Click **Next** to create the data view and move on to define an event view.



1.2 Defining Event Views

After pressing **Next** another **Create New Definition** window is displayed. This window will automatically copy the top-level event from the domain into the data view.

After creating a data view, the only event you can copy into it is the top level event of the domain. The **Create New Definition** window therefore contains the Patient Demographics event.

Copying child items and events

By default, **Copy all child Data Items** is selected. This means that all the data items attached to this event in the domain will be copied into the data view along with the event.

Also by default, **Copy all child Events** is NOT selected. Placing a tick against this option would copy all the child events of this event (and all the items held in those events) from the domain into the data view.

Also, by default **Copy all child Documents** is NOT selected. Placing a tick against this option would copy all the child documents of this event from the domain into the data view.

The **Properties** section of the window displays the properties from the **General** tab of the event definition.

By default the event is named **Linked to Patient Demographics**.

Set the **Name** to **Patient Demographics**

Create New Definition

Details

New Definition Type: Event View

Parent Definition: Data View : Colonoscopy (A)

Linked To Definition: Event : Patient Demographics

☐ Copy all child Events

☒ Copy all child Data Items

☐ Copy all child Documents

Properties

Name: Patient Demographics

Description:

Archived?: No

Base Event: Patient Demographics

Protection: Not protected

Hide in Subject Overview?: No

URL:

Image Icon: (default)

Create Edit Next Cancel

Protection – This allows an event view protection type to be defined to restrict whether the event view can be created, deleted or modified. The different types of event view protection are as follows:

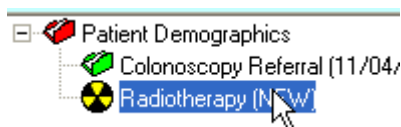
- Cannot create
- Cannot delete
- Cannot modify

Event view protection is discussed later in this tutorial.

URL – This is an organisation defined option to a location outside of InfoFlex and if the user selects the Icon on the toolbar (in Data Entry), they are automatically taken to a predefined location, e.g. a local intranet page (help page, reference documentation), external web page etc.



Image Icon – This allows you to define different event icons in the data view. This can be as simple as a different colour folder for each event or can be various images, e.g.

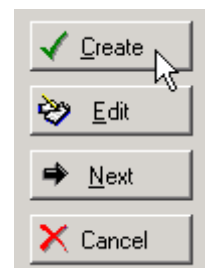


There is a wizard style mechanism to continue.

The **Create** button creates the event view and displays it on the main screen.

The **Edit** button creates the event view and opens the event view definition.

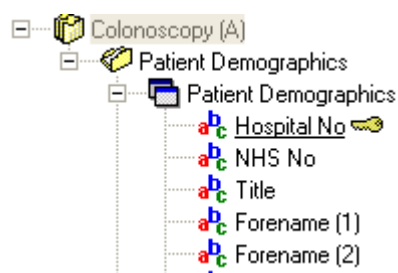
The **Next** button allows you to proceed to creating a panel.



Click **Create** to copy the event and its items into the data view.

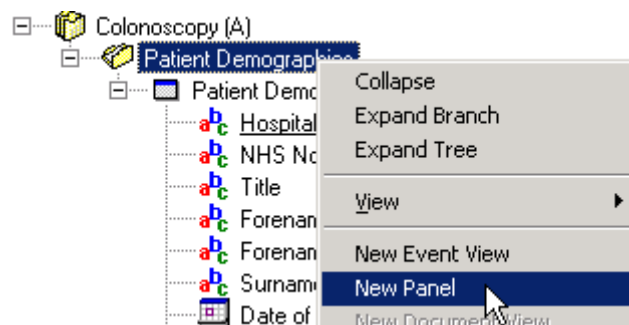
The **Patient Demographics** Event View is displayed in the tree underneath a panel entitled **Patient Demographics**.

The items are displayed attached to one panel only to enable you to create more panels and group the items as you wish.



1.3 Defining Panels

Right click the **Patient Demographics** event view and choose **New Panel**.

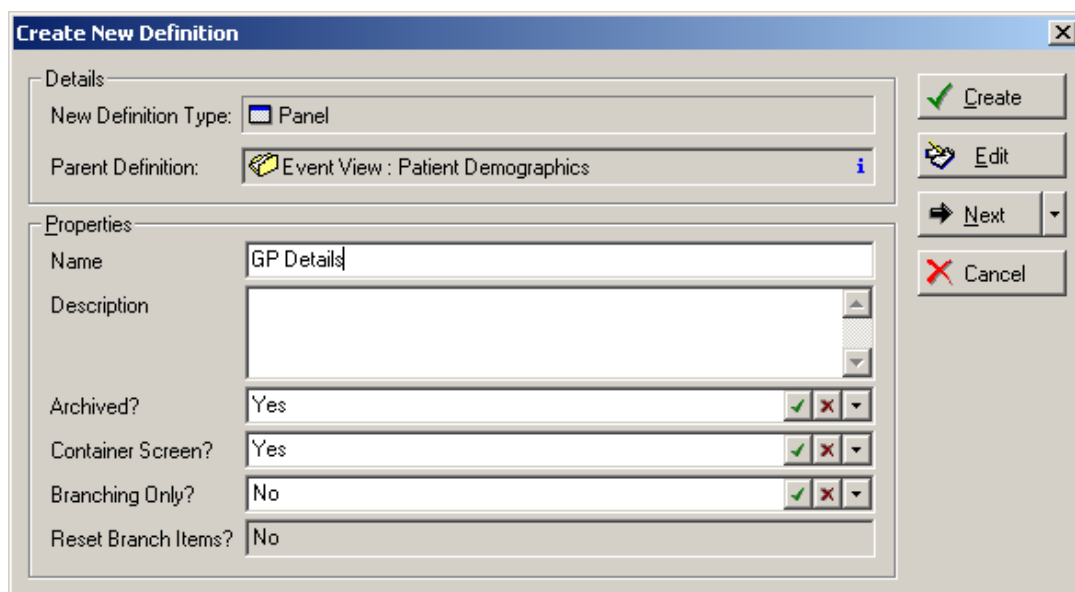


A **Create New Definition** window is displayed.

The **Details** section of the window describes what is being created.

The **Properties** section of the window displays the properties from the **General** tab of the panel definition.

Set the **Name** to **GP details**.



Container Screen? – This defaults to **Yes**. A panel can contain multiple panels inside it. If the panel being defined is a main panel, and not contained inside another panel, the property is **Yes**. If the panel is one that will be inside another panel, then the container screen property would be **No**.

Branching Only – When this option is set to **Yes** then the panel will only be available in Data Entry if branching criteria are fulfilled from a different panel.

Reset Branch Items? – This option is only applicable to **Branching Only** panels. It defines what will happen when the data that allowed the branching panel to be reached is changed so that the branch is no longer accessible. This is explained further in section 4.4 *Setting panel properties for Branching destinations*.

Creating the Panel

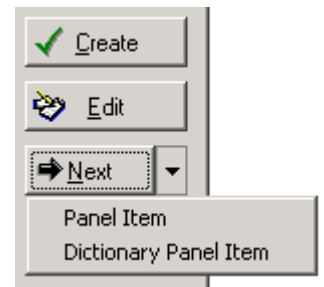
There is a wizard style mechanism to continue creating a panel.

The **Create** button creates the panel and displays it on the main screen.

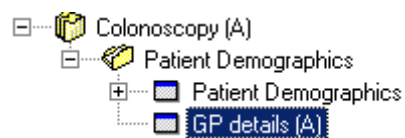
The **Edit** button creates the panel and opens the panel definition.

The **Next** button allows you to proceed to creating an item.

Click **Create** to create the panel.




The panel is displayed in the tree.




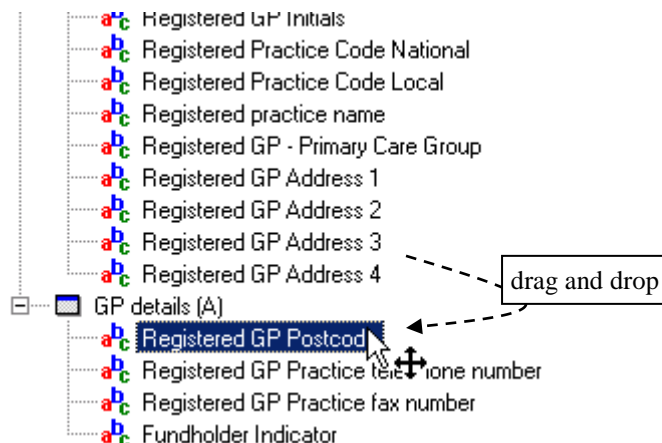
1.4 Re-ordering items

Expand the **Patient Demographics** panel to display the items.

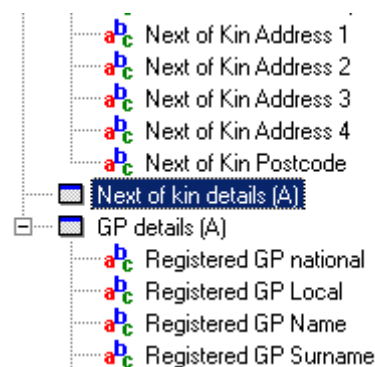
By dragging and dropping, drag all of the **Registered GP** items onto the **GP details** panel.

Release the mouse when a cross symbol  appears next to the mouse.

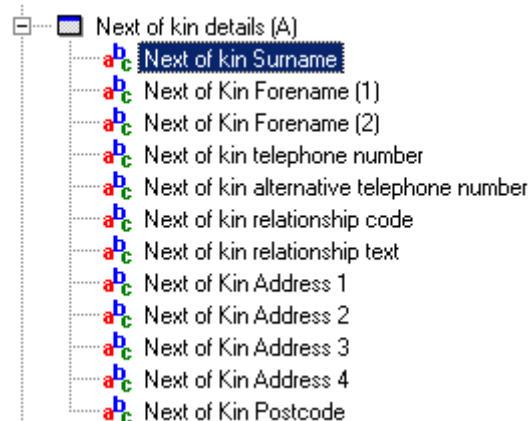
If there is a no entry symbol  next to the mouse, the item cannot be attached.



Create a new panel called **Next of kin details**. Move it so that it is just above the **GP details** panel.

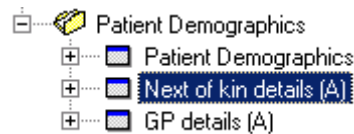


Move all of the **Next of kin** items onto the **Next of kin details** panel.




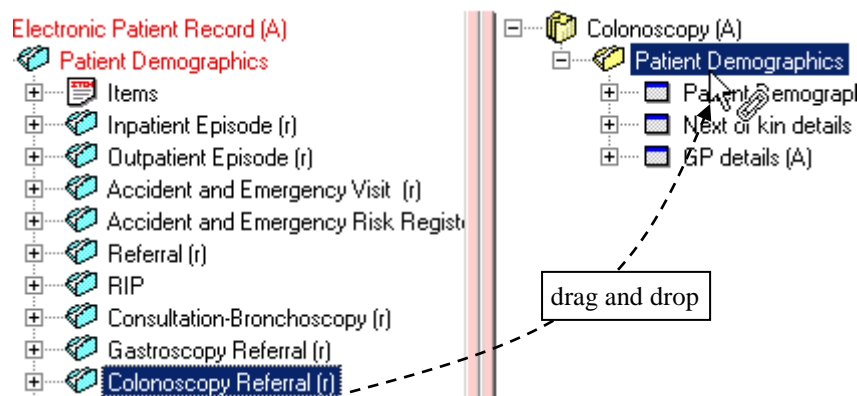
1.5 Define Event View with child items

Collapse the 3 panels attached to the **Patient Demographics** event view.



Drag the **Colonoscopy Referral** event from the domain onto the **Patient Demographics** event view in the data view.

When you are allowed to attach the event, a link symbol  will appear next to the mouse.



When you attach the event view, a **Create New Definition** window is displayed.

The **Details** section of the window describes what is being created.

Set the **Name** to **Colonoscopy Referral**.

Copying child events and items

By default, **Copy all child Data Items** is selected. This means that all the data items attached to this event in the domain will be copied into the data view along with the event.

By default, **Copy all child Events** is NOT selected. Placing a tick in this option would copy all the child events of this event (and all the items held in those child events) from the domain into the data view.

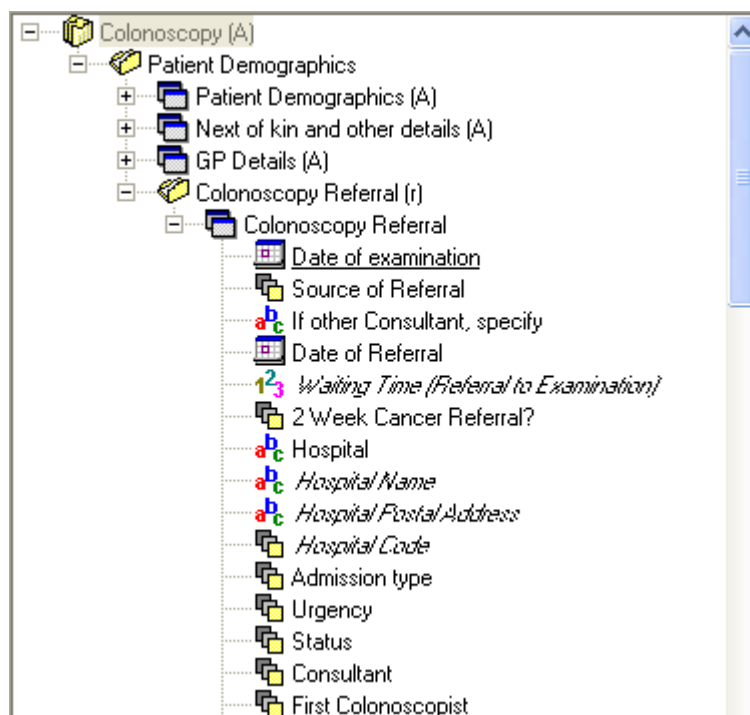
Also, by default **Copy all child Documents** is NOT selected. Placing a tick against this option would copy all the child documents of this event from the domain into the data view.

The **Properties** section of the window displays the properties from the **General** tab of the event definition.

By default the event is named **Linked to Colonoscopy Referral**.

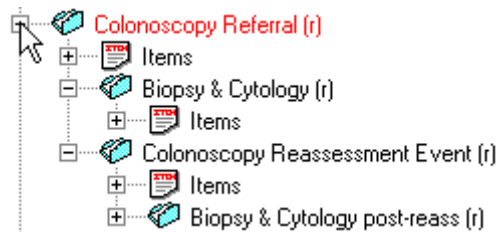
Click **Create** to copy the event and its items into the data view.

The **Colonoscopy Referral** event view is displayed in the tree.

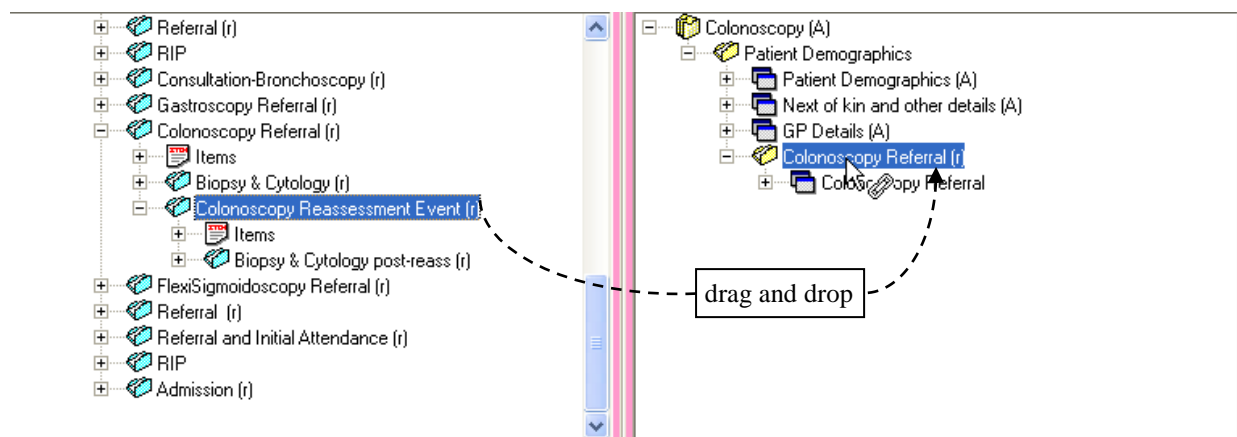


1.6 Define Event View with child events

In the domain, expand the **Colonoscopy Referral** event.



Drag the **Colonoscopy Reassessment Event** from the domain onto the **Colonoscopy Referral** event view in the data view.



When you release the mouse to attach the event view, a **Create New Definition** window is displayed.

Set the **Name** to **Reassessment**.

Tick **Copy all child Events**. This will copy all the events attached to the Colposcopy Reassessment Event into the data view too.

Click **Create** to copy the event and its items into the data view.

Create New Definition

Details

New Definition Type: Event View

Parent Definition: Event View : Colonoscopy Referral (r)

Linked To Definition: Event : Colonoscopy Reassessment Event (r)

☒ Copy all child Events

☒ Copy all child Data Items

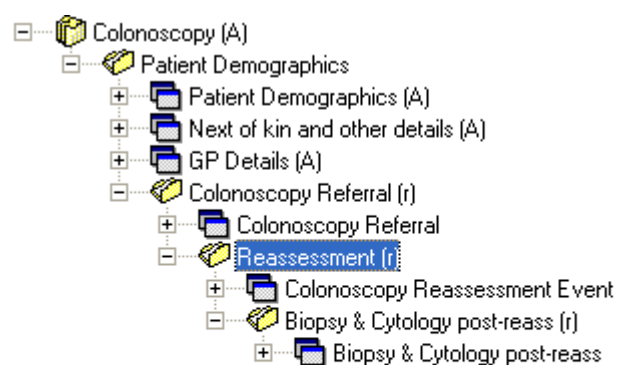
☐ Copy all child Documents

Properties

Name: Reassessment

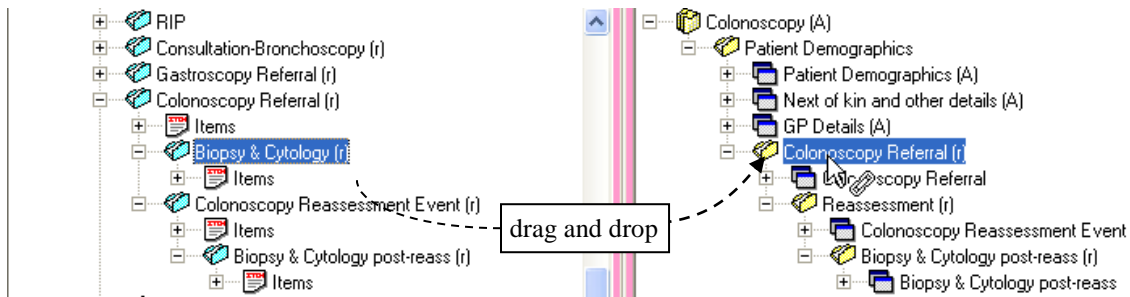
Create Edit Cancel

The **Reassessment** event and the **Biopsy & Cytology post re-assess** event are displayed in the tree.



1.7 Define Event View without child items

Drag the **Biopsy & Cytology** event from the domain onto the **Colonoscopy Referral** event view in the data view.



On the **Create New Definition** window, set the **Name** to **Biopsy & Cytology**.

Remove the tick from **Copy all child Items**.

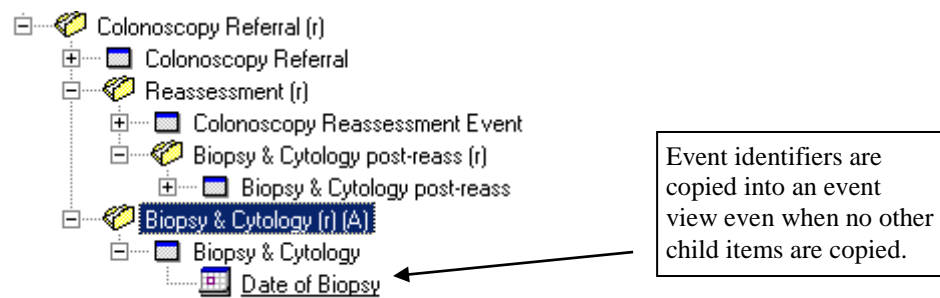
If **Copy all child Documents** is selected then all documents associated with that event would also be copied to the new event.

Only the event will be copied into the data view.

Click **Create** to copy the event into the data view.

The **Biopsy & Cytology** event is displayed in the tree, and is archived.

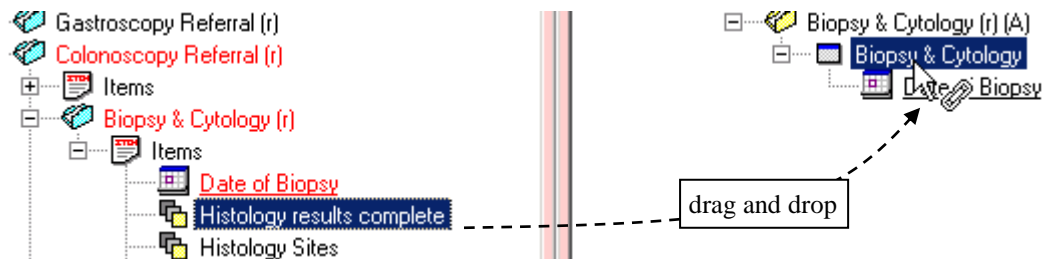
Note that even though you chose not to copy any child items, the **Date of Biopsy** item has been copied into the event view. This is because the identifier of an event **must** exist in any event view.



1.8 Define Panel Items – Copy from the domain

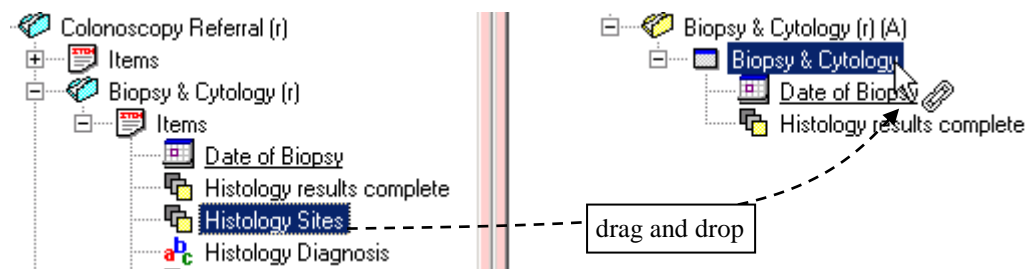
You can choose which items from an event to copy into an event view.

Drag the **Histology results complete** item from the **Biopsy & Cytology** event in the domain onto the **Biopsy & Cytology** panel in the data view.



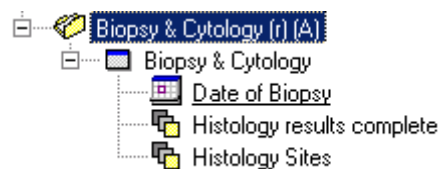
On the **Create New Definition** window, set the **Name** to **Histology results complete** and click **Create** to copy the item into the data view.

Drag the **Histology sites** item from the **Biopsy & Cytology** event in the domain onto the **Biopsy & Cytology** panel in the data view.



On the **Create New Definition** window, set the **Name** to **Histology sites** and click **Create** to copy the item into the data view.

The items are displayed in the tree.



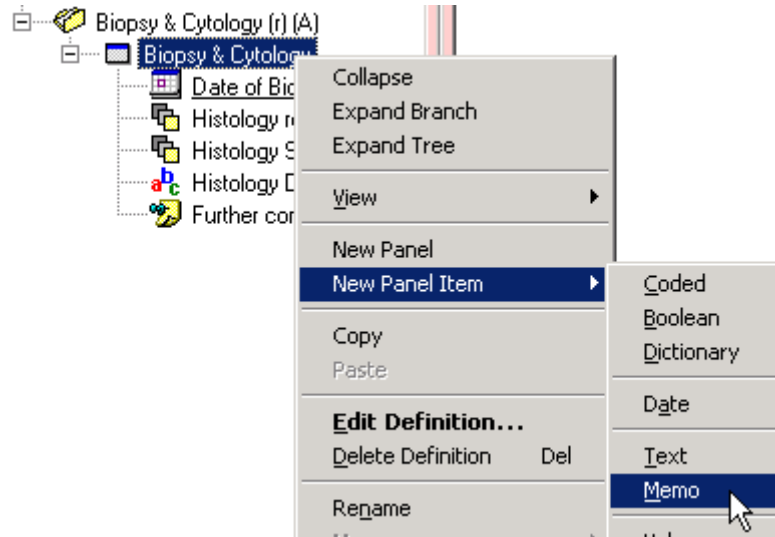
Copy the **Histology Diagnosis** and **Further Comments** items into the data view.

1.9 Define Panel Items – New items

You can define a new item in a panel, even if the item doesn't exist in the domain. When you create the item in the panel, the item will automatically be created in the domain at the same time.

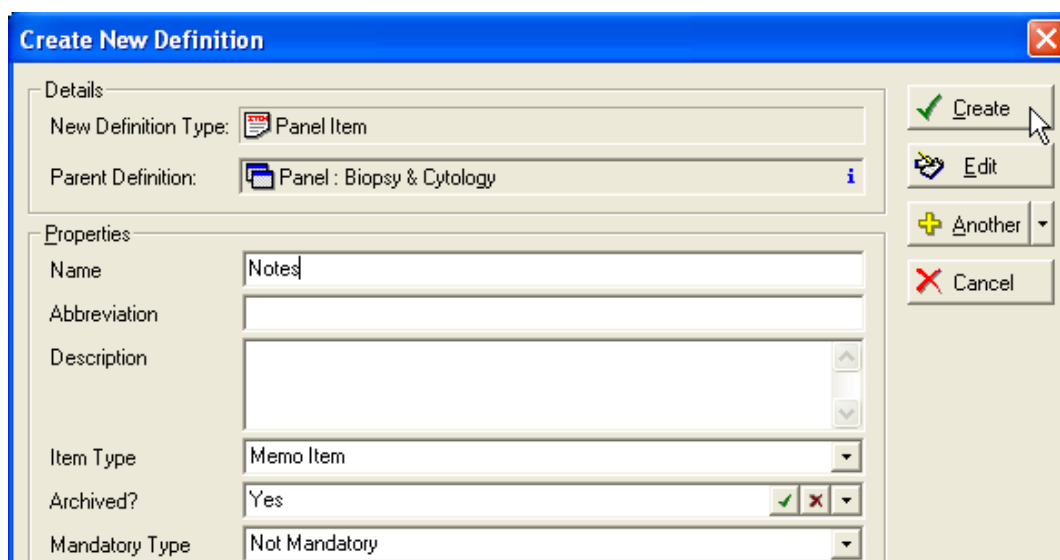
In the data view, right click the **Biopsy & Cytology** panel in the **Biopsy & Cytology** event view.

Choose **New Panel Item** then **Memo**.



The **Create New Definition** window displays the General properties for the item definition since it will be created in the domain at the same time as it is created in the data view.

Name the item **Notes** then press **Create**.



The **Notes** item is created in the data view, and it is also created in the domain, since all core definitions must exist in the domain.

1.10 Panel item properties

To set any of the panel item properties in the data view, double click the panel item definition in the data view to display the panel item definition window.

The following properties can be set on the **General** tab of the panel item definition:

Property	Description	What to enter
Name	The name of the panel item	Free text
Description	A description of the item for reference. (Can be displayed to the Data Entry user if no prompt text has been entered).	Free text
Archived	Controls whether the item is available for Data Entry.	Yes or No
Base Data Item	The name of the corresponding item in the domain (cannot be changed).	-
Item type	The type of item (cannot be changed).	-
Mandatory type	Controls whether the item is mandatory in Data Entry. Can also be set in the item definition. The highest level is used, whether set in the item or panel item.	Not Mandatory, Mandatory, Mandatory (Allow Save).
Write protected	Controls whether the item can be edited in Data Entry. Can also be set in the item definition. The highest level is used, whether set in the item or panel item.	Yes or No
Auto-prompt?	If set to Yes, Data Entry automatically displays the help text entered in the Prompt property below. (If select no, the user can still see the text by pressing F1). Can also be set in the item definition. Properties set in the panel item are used.	Use base item's setting Yes No
Prompt	Enter any required help text for display in Data Entry. Can also be set in the item definition. Text defined in the panel item is used. If none defined, prompt text entered in the item definition is available on pressing F1.	Free text
Tooltip	Enter any required text for a tooltip displayed when hovering over the item name in Data Entry (both screen and grid view). If no panel item tooltip property is defined then the tooltip defined for the base item definition, if any, will be displayed instead.	Free text
URL	If required, the address of a website to access from the item in Data Entry. Can also be set in item definition. URL set in panel item is used. If none set, URL set in the item definition is used.	The URL. (Use the right arrow to test the web address).

Item properties

To set any of the properties in the domain (the core definitions which apply to all occurrences of the item are set in the domain, rather than the limited number of viewing properties that are set in the data view), press the **Edit Data Item Definition** button on the panel item definition.

The screenshot shows the 'Edit Panel Item Definition' dialog box. The title bar reads 'Edit Panel Item Definition'. The main title is 'Text Panel Item : Notes'. Below the title bar are four tabs: 'General', 'Branching', 'Availability', and 'Action List'. The 'General' tab is selected. The form contains the following fields and controls:

- Name: Text field containing 'Notes'.
- Description: Text area.
- Archived?: Dropdown menu set to 'No'.
- Base Data Item: Text field containing 'Notes (A)'.
- Item Type: Text field containing 'Text Item'.
- Mandatory Type: Dropdown menu set to 'Not Mandatory'.
- Write Protected?: Dropdown menu set to 'No'.
- Auto-prompt?: Dropdown menu set to '0 - Use base item's setting'.
- Prompt: Text area.
- URL: Text field.

At the bottom of the dialog are four buttons: 'Edit Data Item Definition' (with a document icon), 'Save' (with a floppy disk icon), 'OK' (with a checkmark icon), and 'Close' (with an 'X' icon).

The window toggles to the item definition. In the item definition, a corresponding **Edit Panel Item Definition** button toggles back to the panel item definition.

The screenshot shows the 'Edit Data Item Definition' dialog box. The title bar reads 'Edit Data Item Definition'. The main title is 'Text Data Item : Notes (A)'. Below the title bar are six tabs: 'General', 'Advanced', 'Calculation', 'Validation', 'Actions', and 'History'. The 'General' tab is selected. The form contains the following fields and controls:

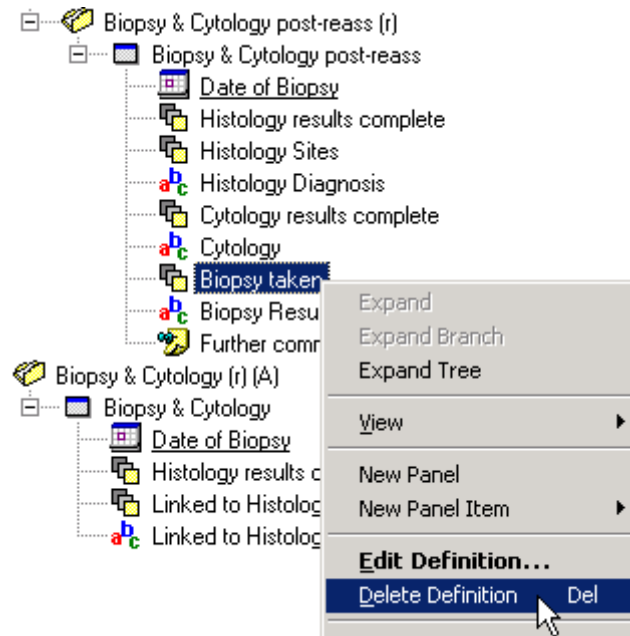
- Name: Text field containing 'Notes'.
- Abbreviation: Text field containing 'Notes'.
- Description: Text area.
- Item Type: Text field containing 'Text Item'.
- Archived?: Dropdown menu set to 'Yes'.
- Mandatory Type: Dropdown menu set to 'Not Mandatory'.
- Write Protected?: Dropdown menu set to 'No'.
- MDS Item?: Dropdown menu set to 'No'.
- Auto-prompt?: Dropdown menu set to 'No'.
- Prompt: Text area.
- Indexed?: Dropdown menu set to 'No'.

At the bottom of the dialog are four buttons: 'Edit Panel Item Definition' (with a document icon), 'Save' (with a floppy disk icon), 'OK' (with a checkmark icon), and 'Close' (with an 'X' icon).

1.11 Deleting Panel Items

Expand the **Biopsy & Cytology post-reass** panel.

Right click the **Biopsy taken** item and choose **Delete definition**.



Click **OK** to the confirmation message.

The **Biopsy taken** item is removed from the data view.

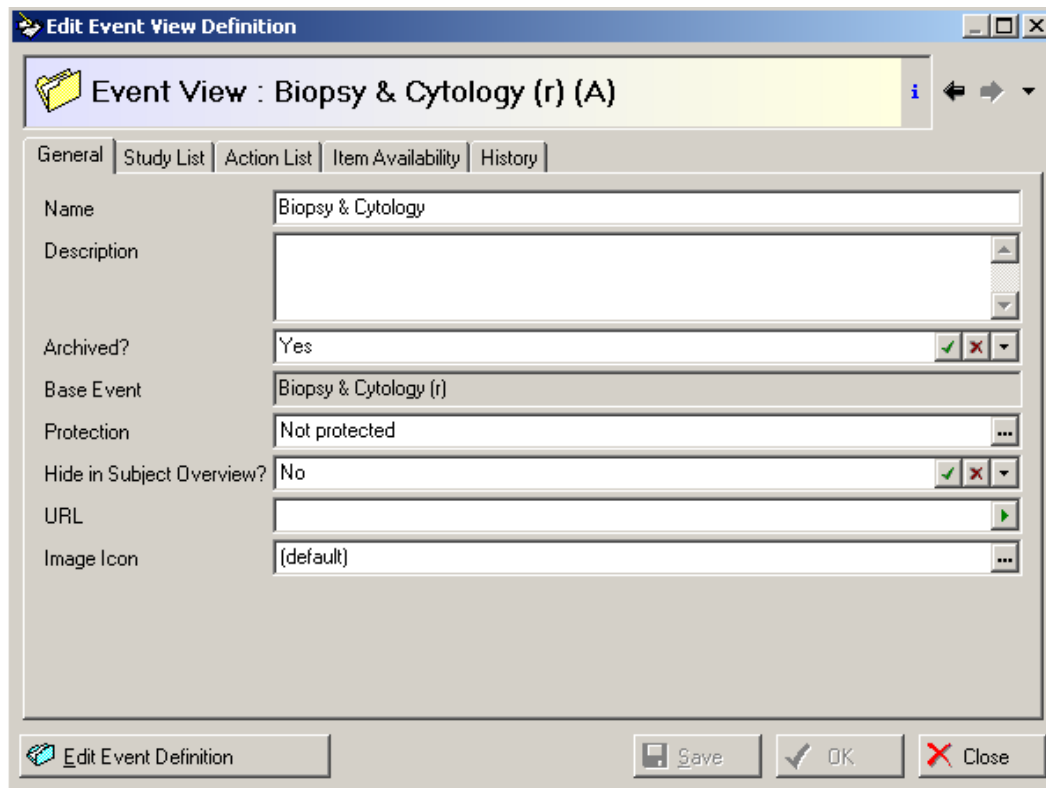
Note that the **Biopsy taken** item remains in the domain, but is displayed in black to indicate that it does not exist in any displayed data views.



Delete the **Further comments** item from the same panel.

1.12 Event View properties

Only a limited number of properties can be set in the event view, which relate to how the event is viewed in Data Entry.



Name

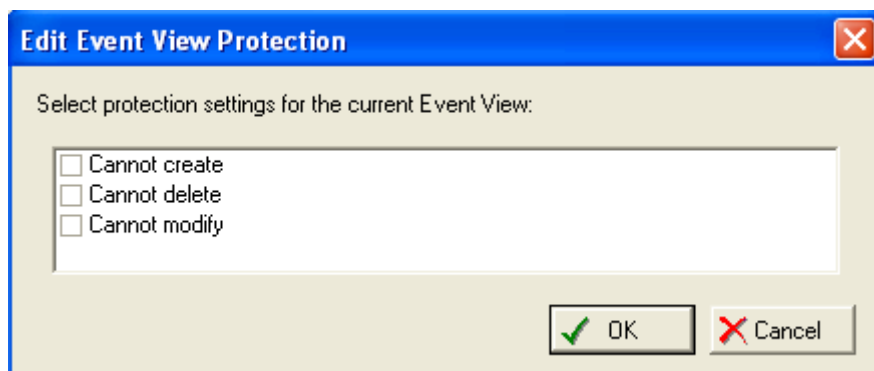
The name of the event view can be different from the name of the event in the domain.

Archived

If an event view is archived, it will not be available in Data Entry. To make an event view available, the event view must be unarchived, and the event in the domain must also be unarchived.

Protection

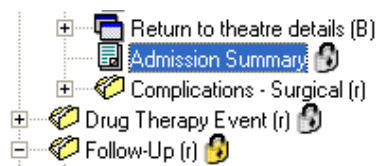
The **Protection** property governs whether an event view can be created, deleted or modified.



In Data Entry, the protection property behaves as follows:

Cannot create:	It will not be possible to create new instances of events or documents. Note that events whose protection level is set to Cannot Create can still be autogenerated.
Cannot modify:	Event or document will be displayed as read only. New events are editable until saved.
Cannot delete	Not possible to delete the event or document.

Once the Event View and Document View definitions have some level of protection, a padlock image will appear next to the Event View or Document View in Design Management. For full protection then the definition will be marked with a yellow padlock image, for partial protection then the definition will be marked with a white padlock image.



These Item Marks can be controlled through the **Options...** dialog in the **View** menu.

A special case exists for the deletion of protected events. If the selected event is not protected against deletion, but one of its descendants is protected, then it will not be possible to delete the selected event. This check on the delete protection of descendant events will only be performed for the current data view and will not take into consideration the delete protection setting for similar child event views in other data views.

Another special case occurs for create and delete protection assigned to the root event view. The create and delete protection assigned to the root event view will actually affect the creation and deletion of the subject.

In Data Entry, when the selected event or document is protected against modification the Data Entry frame caption bar will be updated to contain the text ***** PROTECTED *****. Appropriate error messages will be displayed when attempting to create or delete a protected event or document.

Hide in Subject Overview

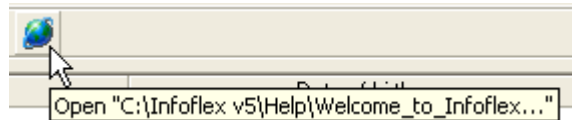
When set to Yes, the event view is hidden in the Subject Overview. This is useful when many instances of the event view might exist for a subject, but the Data Entry user might only need to add new instances of the event view. The event view is still available in the study design, and new instances of the event view can be added.

URL

If you put the path of an html document in the URL box,

URL	<input type="text" value="C:\Infoflex v5\Help\Welcome_to_InfoFlex5.htm"/>
Image Icon	<input type="text" value="(default)"/>

the  button will be enabled on the tool bar in Data Entry when you select the event view in a patient's subject overview.




When you press the  button, the html file will be displayed on the screen in the web browser.



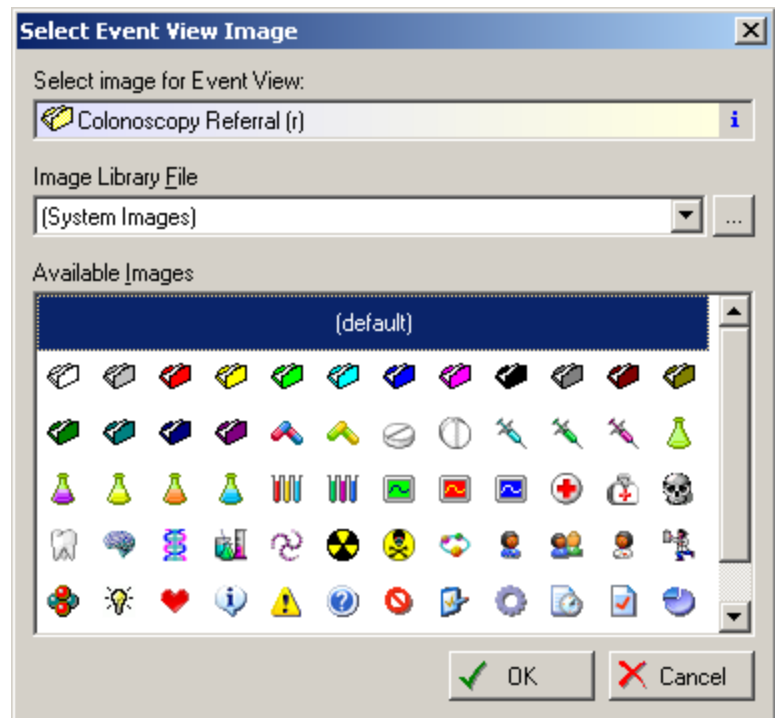
Image icon

The image icon option allows you to specify a different icon for the event view on the subject overview in Data Entry.

An entry of (default) means that the colour of the folder on the subject overview will be the standard yellow.



Press the **...** button to choose a different icon for the folder.

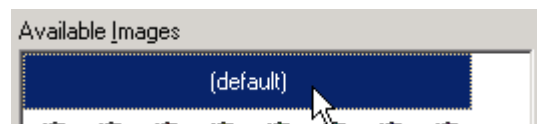


The **Select image for Event View** box displays the name of the event that you are setting a colour for.

The **Image Library File** box allows you to select an icon using Windows Explorer.

The **Available Images** section allows you to select an InfoFlex image.

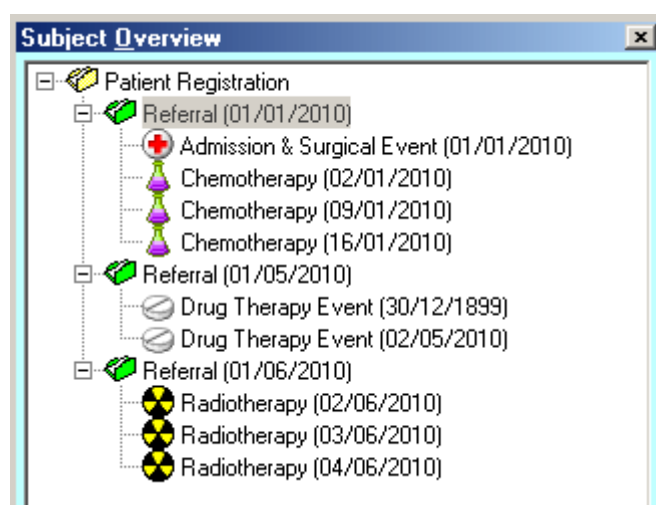
Choose (default) to set to the standard yellow.



Or select a different InfoFlex image for the event view.



This is how a subject overview might look in Data Entry.

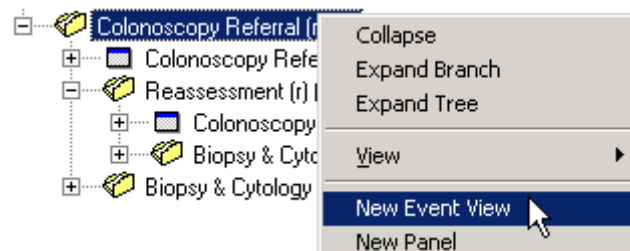


1.13 Define new Event Views

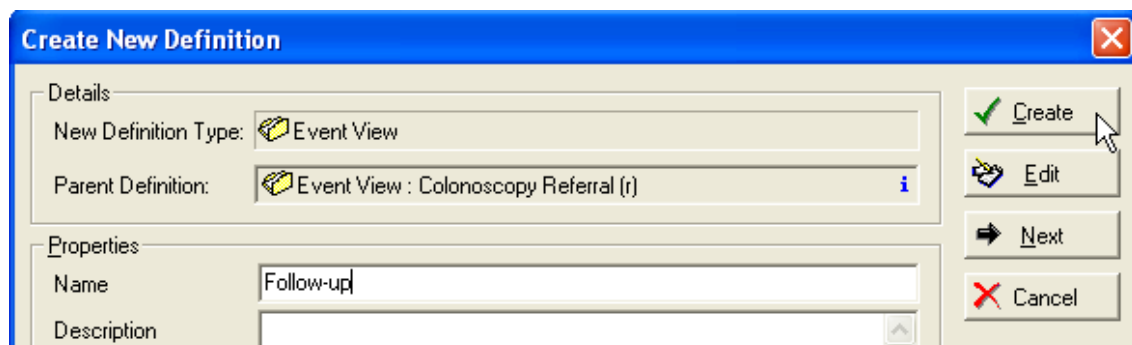
You can define a new event view in a data view, even if the event doesn't exist in the domain. When you create the event in the data view, the event will automatically be created in the domain at the same time.

Close any open domains and data views, and open the **Electronic Patient Record** domain and the **Colonoscopy** data view.

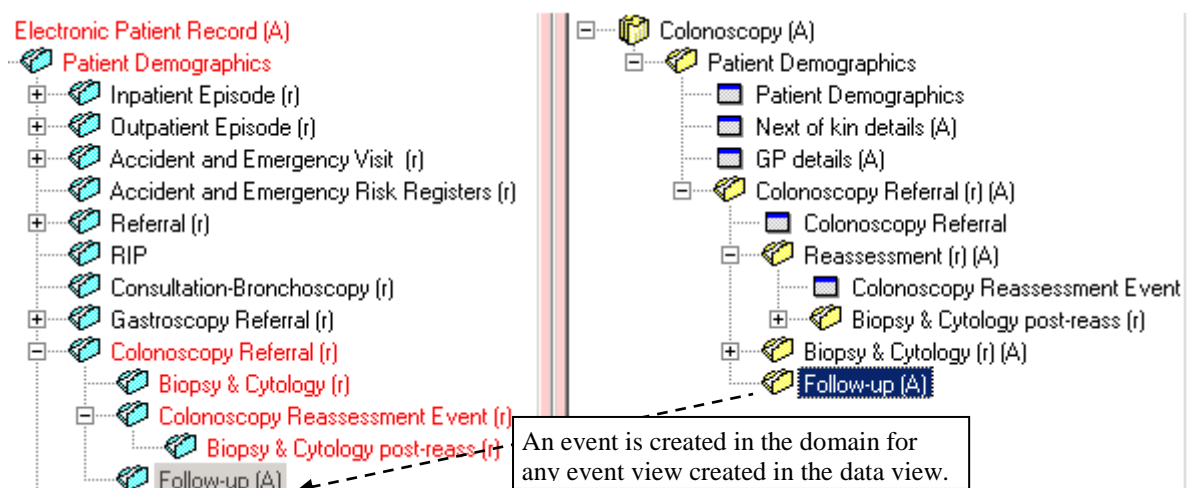
Right click the **Colonoscopy Referral** event view in the **Colonoscopy** data view and choose **New Event View**.



On the **Create New Definition** window, name the event **Follow-up** then click **Create** to create the event view.



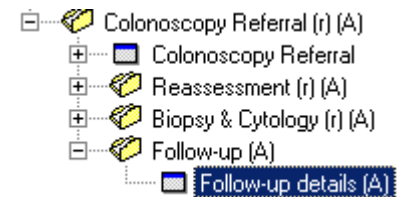
The event view is created in the data view, and it is also created in the domain, since the core definitions must be stored in the domain.



1.14 Define new items

Since you have not created this event view by copying it from the domain, no panel exists in the event view. Before you can create any items in an event view, a panel must be created.

In the data view, define a new panel in the **Follow-up** event view and name it **Follow-up details**.



Define a new **date** panel item on the **Follow-up details** panel and name it **Date of follow-up**.

The **Create New Definition** window displays the General properties for the item definition since it will be created in the domain at the same time as it is created in the data view.

On the **Create New Definition** window click **Edit**.

The **Edit Panel Item Definition** window is displayed. This contains only the properties that can be set at the data view level.

Click the **Edit Data Item Definition** button to open the item definition in the domain and set the core properties.

Set the **Date Format** to **dd/mm/yyyy**.

Set a date restriction such that the date must be later than the **Date of Referral** in the **Colonoscopy Referral** event.

Date Data Item : Date of follow-up (A)

General | Advanced | Calculation | Validation | Actions | History

Date Format: dd/mm/yyyy

Warning Limits?: No

Warning Low Value:

Warning Low Message:

Warning High Value:

Warning High Message:

Mandatory Limits?: No

Mandatory Low Value:

Mandatory Low Message:

Mandatory High Value:

Mandatory High Message:

Restriction?: Yes

Restriction Type: Warning

Restriction Condition: Later Than (>)

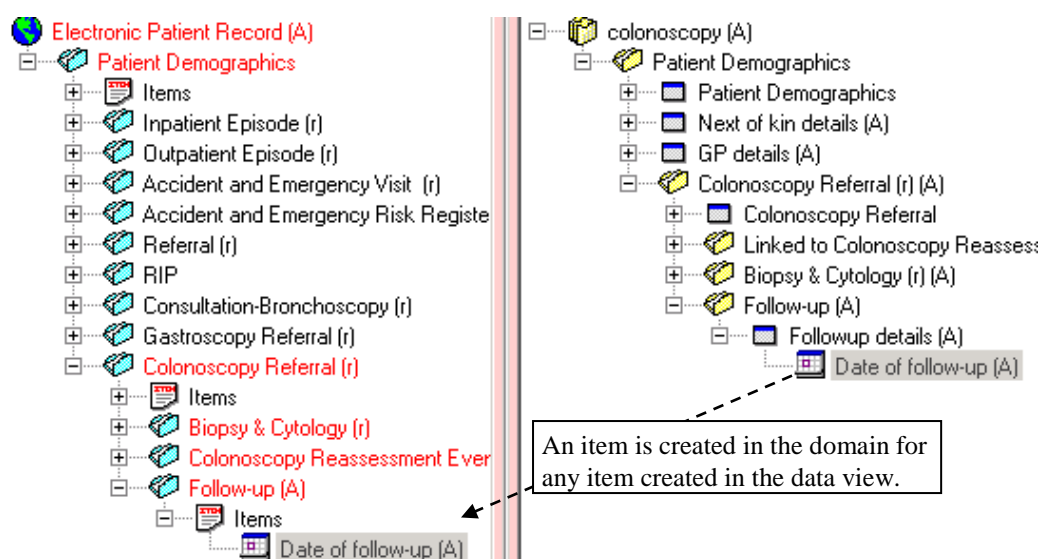
Relative Item: Colonoscopy Referral \ Date of Referral

Restriction Message:

Edit Panel Item Definition | Save | OK | Close

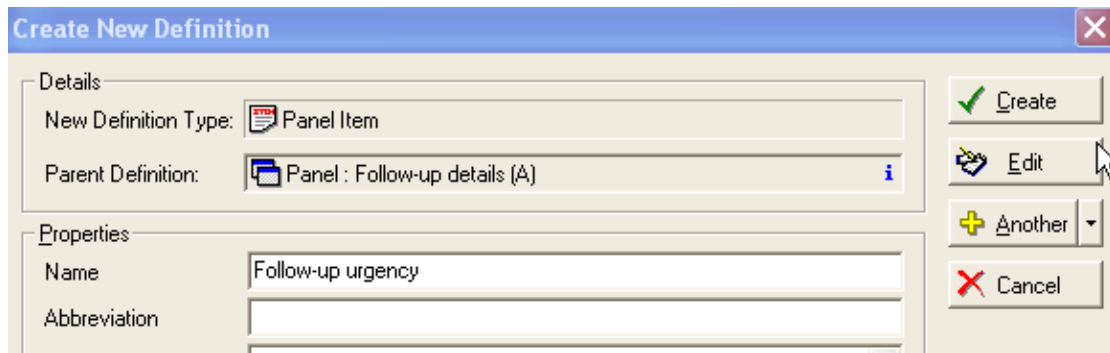
Click **OK** to save and close the item definition.

The **Date of follow-up** item now exists both in the Colonoscopy data view and in the domain.

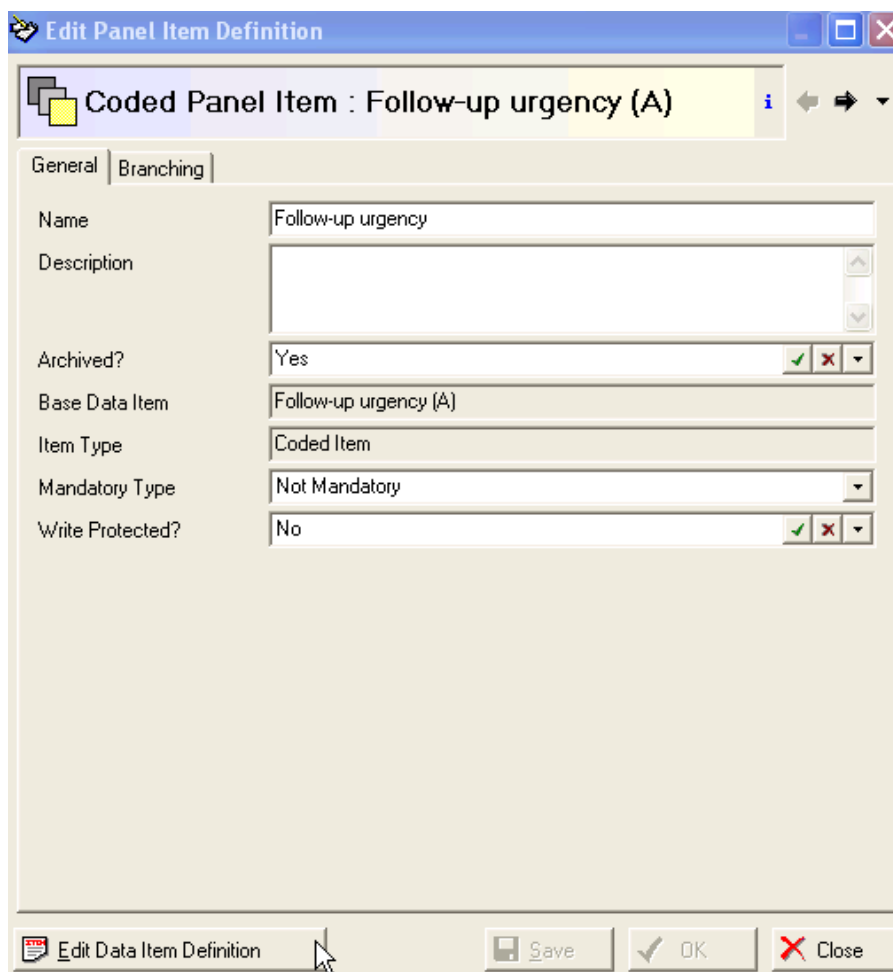


Define a new coded panel item on the **Follow-up details** panel and name it **Follow-up urgency**.

On the **Create New Definition** window click **Edit**.

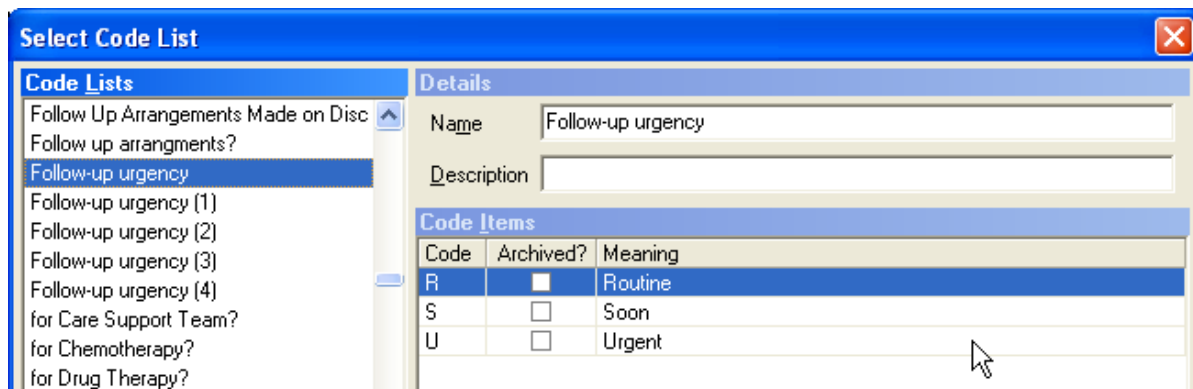


Click the **Edit Data Item Definition** button to open the item definition in the domain and set the core properties.

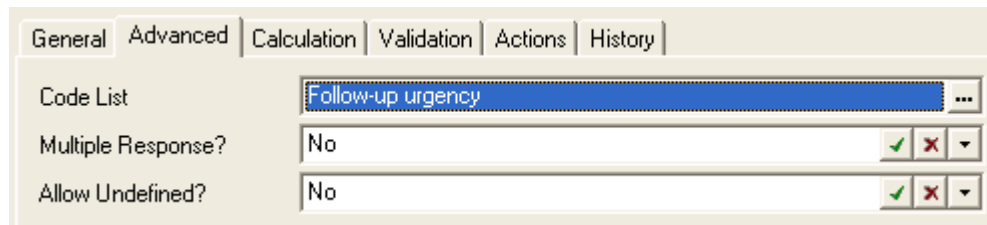


On the **Edit Data Item Definition** window, go to the **Advanced** tab.

Open the Code list manager from the Code list box, and find the code list entitled **Follow-up Urgency**.

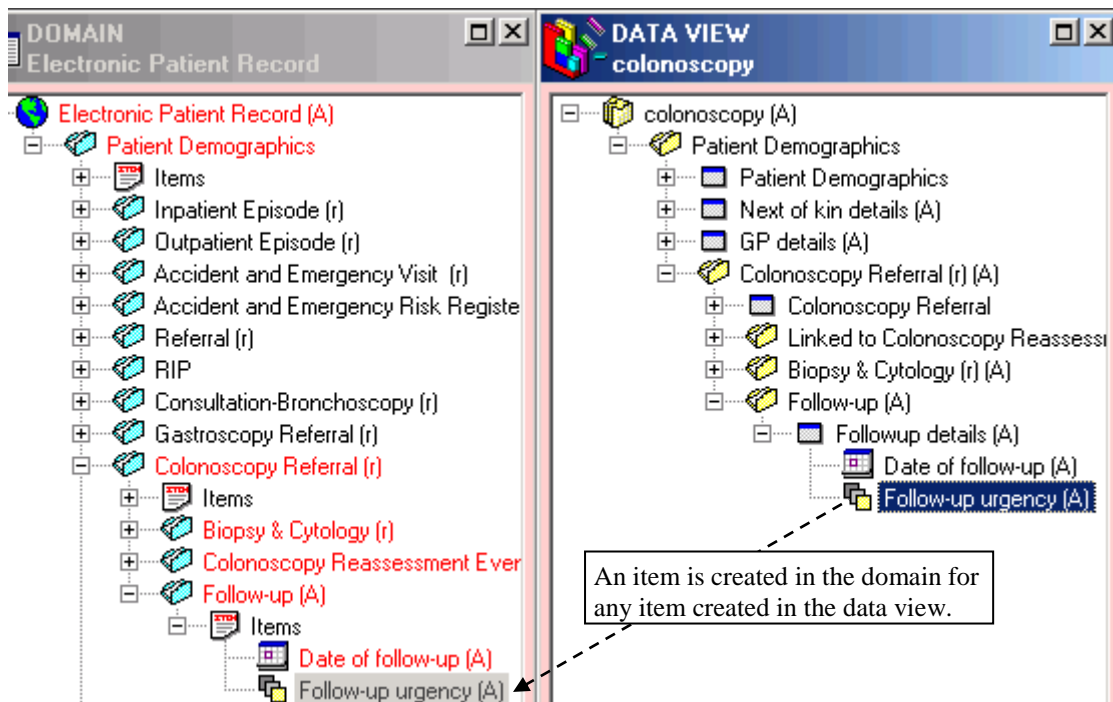


Press the **Select** button to select this code list for your coded item.



Save and close the item definition.

The **Follow-up urgency** item now exists both in the Colonoscopy data view and in the domain.



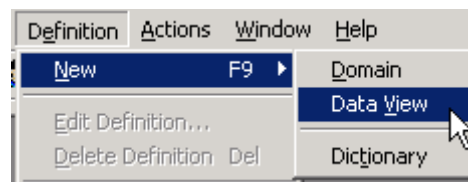
1.15 Define Event Views by copying from other Data Views

You can define event views by copying from other data views, rather than copying from the domain. The advantage of copying from other data views, is that if you have chosen a particular combination of items, or a particular arrangement of panels, then this arrangement is copied with the event view. Any properties set at the data view level, **including branching**, are also copied when you copy from one data view to another.

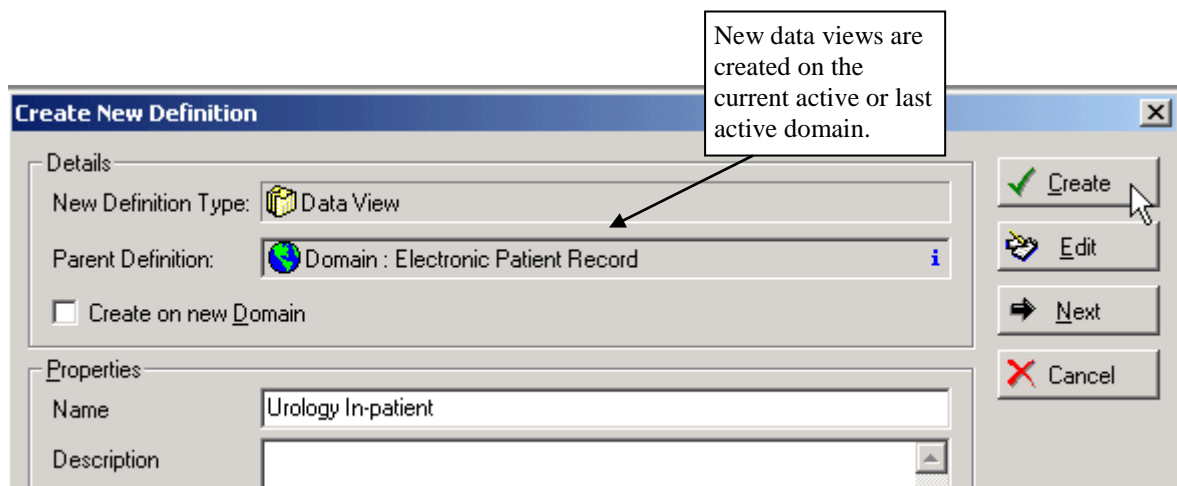
We shall start this exercise by creating a new data view into which to copy some event views.

Close the open domain and data view.

Go to the **Definition** menu and choose **New** and then **Data view**.



The **Create New Definition** window is displayed.



Note that although there is no open domain, since the last domain that was active was the **Electronic Patient Record** domain, that is the domain that this data view will be attached to.

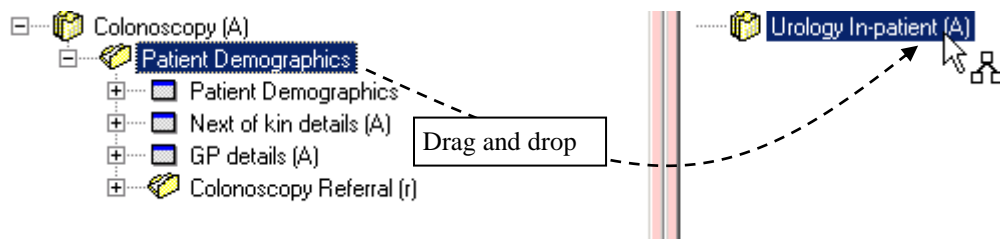
The **Create on new Domain** option would allow you to create the data view and create a new domain at the same time.


If you had wished to create the data view on a different domain, you would need to open that domain and attach the data view directly to that domain using the right click menu.

Name the new Data View **Urology In-Patient** then click **Create**, then click **OK** to the message **Open new data view definition?**.

Display the **Colonoscopy** data view.

Drag the **Patient Demographics** event view from the **Colonoscopy** data view to the **Urology In-patient** data view.



A 3-way symbol appears next to the mouse  when you can attach the event view.

The **Create New Definition** window is displayed

By default the event view is named **Based on Patient Demographics**. The prefix is **based on** since the definition uses the combination of panels and items from the Patient Demographics event view, rather than copying the whole event view directly from the domain.

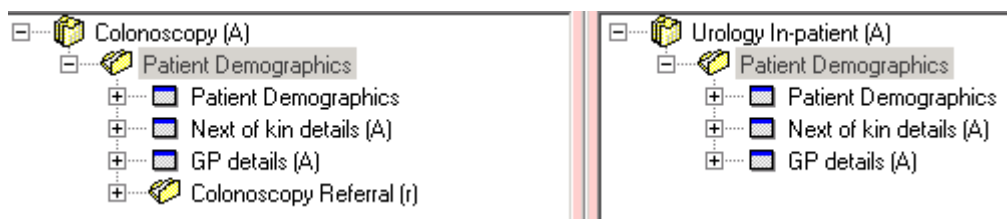
By default, **Copy all child Panels and Panel Items** is selected. This means that all the panels and panel items attached to this event view in the originating data view will be copied into the new data view.

By default, **Copy all child Event views** is NOT selected.

Also, by default **Copy all child Documents** is NOT selected. Placing a tick against this option would copy all the child documents of this event from the domain into the data view.


Set the **name** of the event view to **Patient Demographics** then click **Create**.

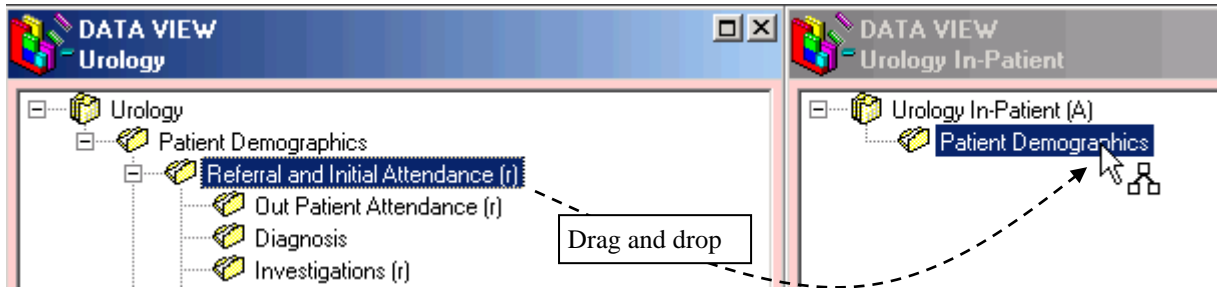
The Patient Demographics event and the 3 panels have been copied into the Urology In-Patient data view.



Close the **Colonoscopy** data view and open the **Urology** data view.

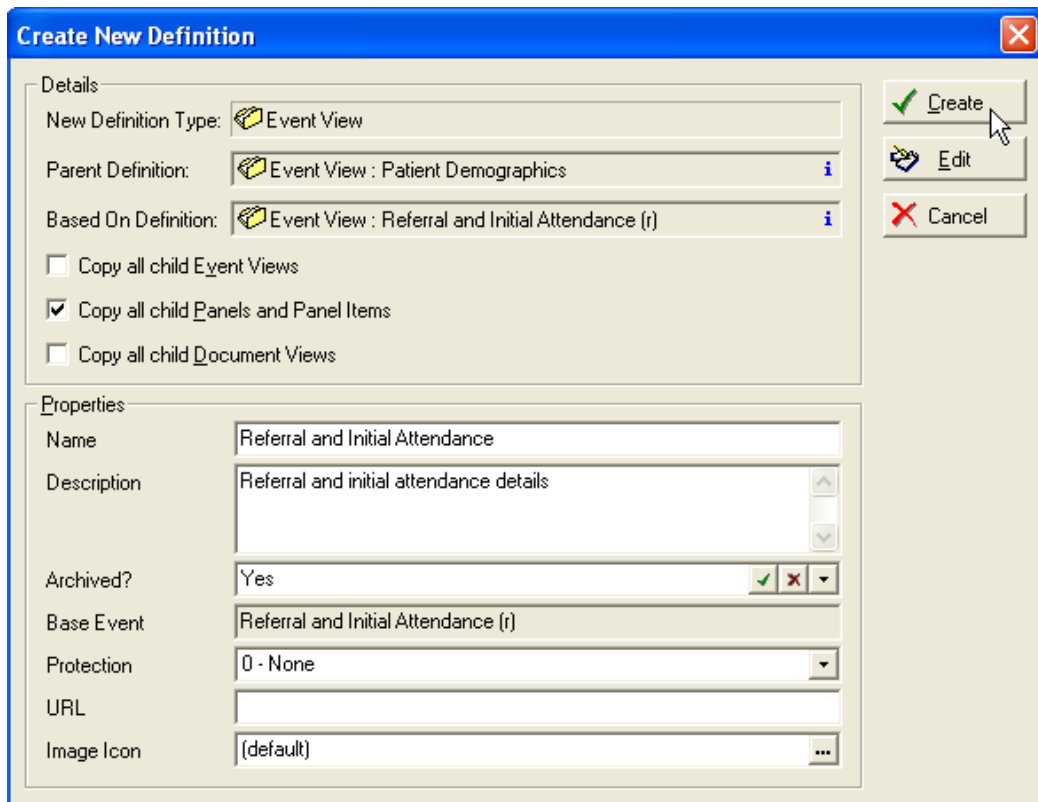
Drag the Referral and Initial Attendance event view from the **Urology** data view to the **Urology In-Patient** data view.

A 3-way symbol appears next to the mouse  when you can attach the event view.

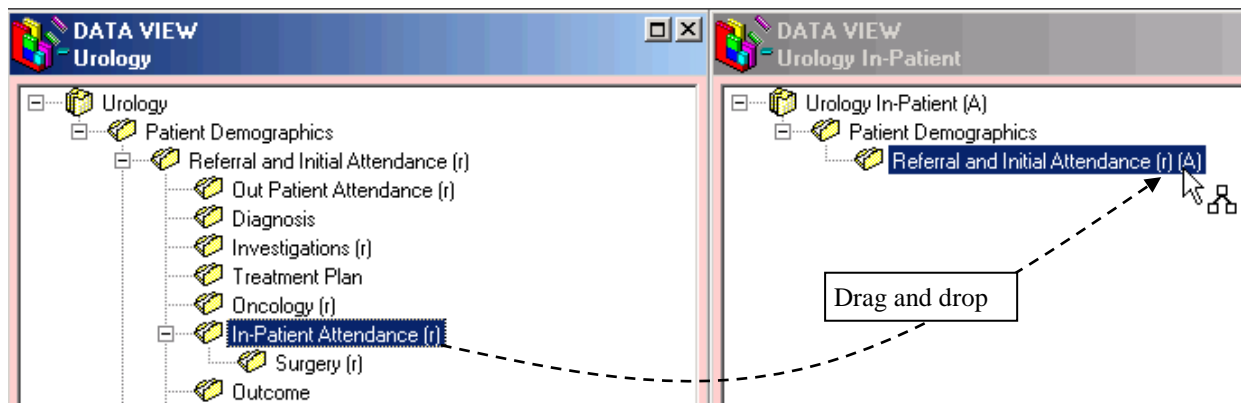


On the **Create New Definition** window, set the **Name** to **Referral and Initial Attendance**.

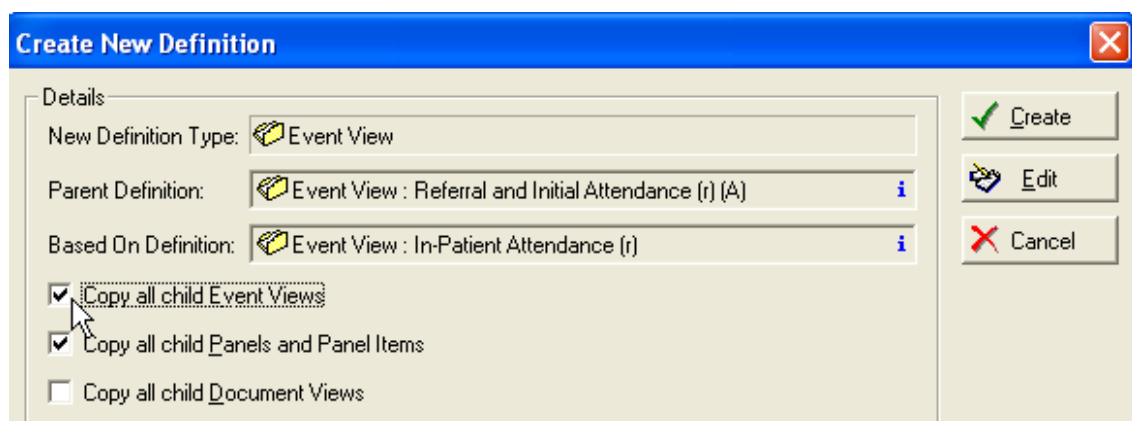
Click **Create** to copy the event view from **Urology** into **Urology In-Patient**.



Drag the **In-Patient Attendance** event view onto the **Referral and Initial Attendance** event view.

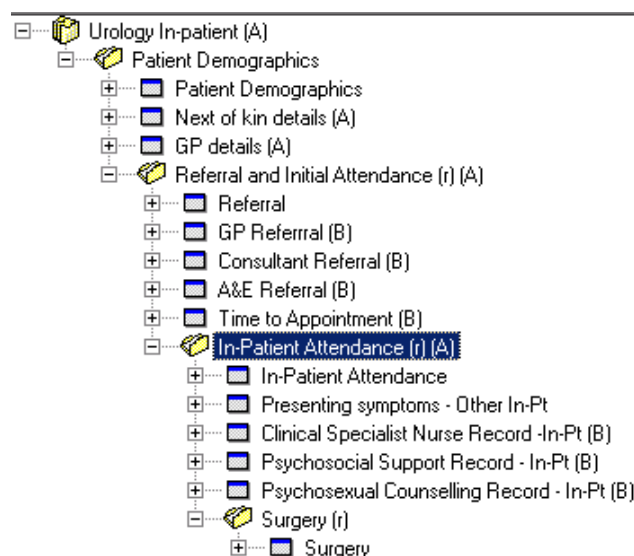


On the **Create New Definition** window, tick the **Copy all child Event Views** box.



Click **Create**.

The **In-Patient Attendance** event view is displayed on the tree, and the **Surgery** event view has been copied over as well.



1.16 Define Event Views by copying from other Domains

You can define event views by copying them from other domains. In this case, the combination of items and panels will be created in the data view, and the events and items will also be created in the domain. No link to the domain you copied from will be retained.

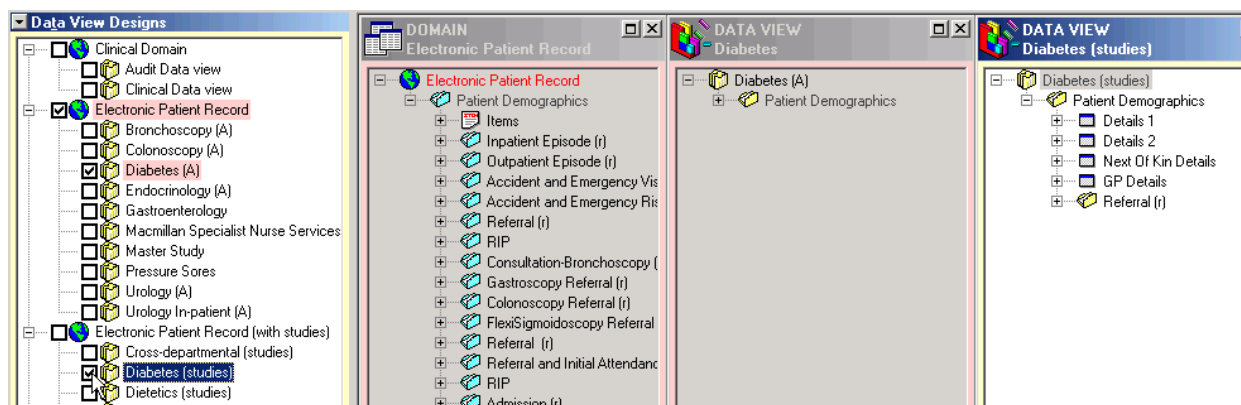
Close any open domains and data views.

Display the **Electronic Patient Record** domain.

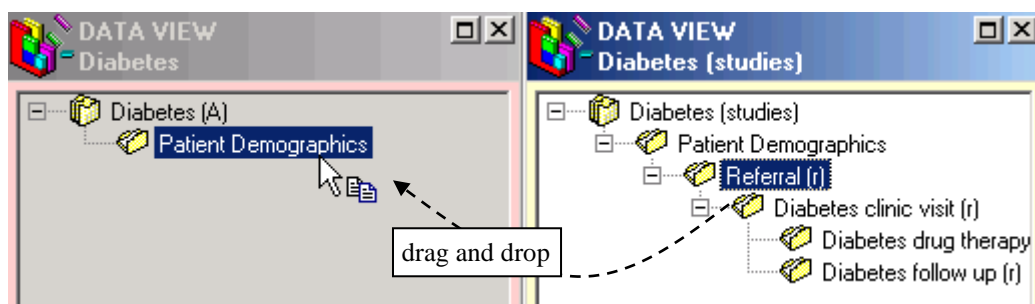
Create a new data view called **Diabetes**.

Copy the **Patient Demographics** event from the **Electronic Patient Record** domain into the **Diabetes** data view.

Display the **Diabetes (studies)** data view from the **Electronic Patient Record (with studies)** domain.

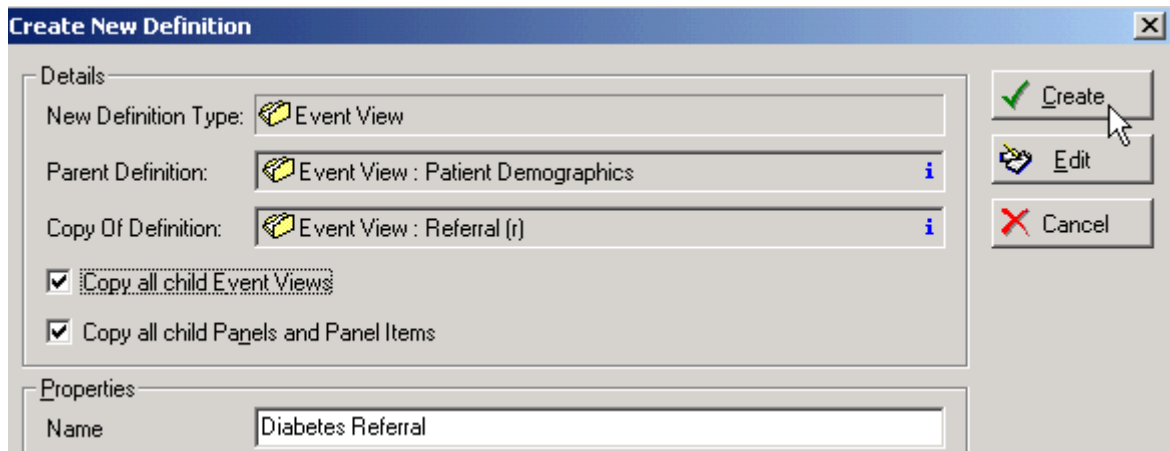


Copy the **Referral** event from the **Diabetes (studies)** data view and attach it to the **Patient Demographics** event the **Diabetes** data view.

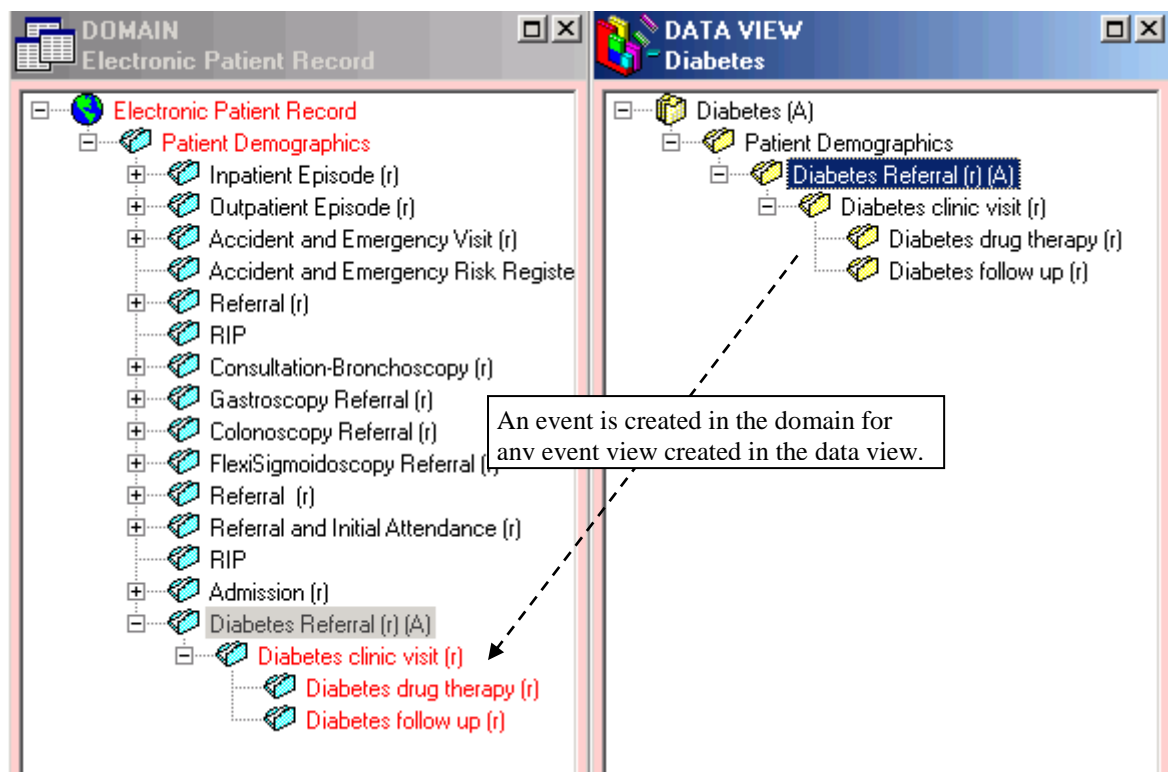


On the Create New Definition window, set the name of the copied event to **Diabetes Referral**.

Choose to copy it with **all child event views**.



The **Diabetes Referral** event and all its child events are copied from the Diabetes (studies) data view (to which no links are retained) and created in the **Diabetes** data view and also in the **Electronic Patient Record** domain, since anything that is created in a data view must exist in the domain.



Note, however, that when copying from another domain, the study property does not remain set on the event that is copied in.

Open the event view definition for the **Diabetes clinic visit** event view in the **Diabetes** data view, and press the **Edit Event definition** button.

Edit Event View Definition

Event View : Diabetes clinic visit (r)

General | Summary View | Study List | History

Name: Diabetes clinic visit

Description:

Archived?: No

Base Event: Diabetes clinic visit (r)

Protection: 0 - None

URL:

Image Icon: (default)

Edit Event Definition | Save | OK | Close

The event definition is displayed, and the Study is set to (**Generic**).

Edit Event Definition

Event : Diabetes clinic visit (r)

General | Advanced | Identifiers | Auto-create Events | View Switching | Actions | History

Name: Diabetes clinic visit

Description:

Archived?: No

Repeat?: Yes

Study: (Generic)

Edit Event Definition | Save | OK | Close

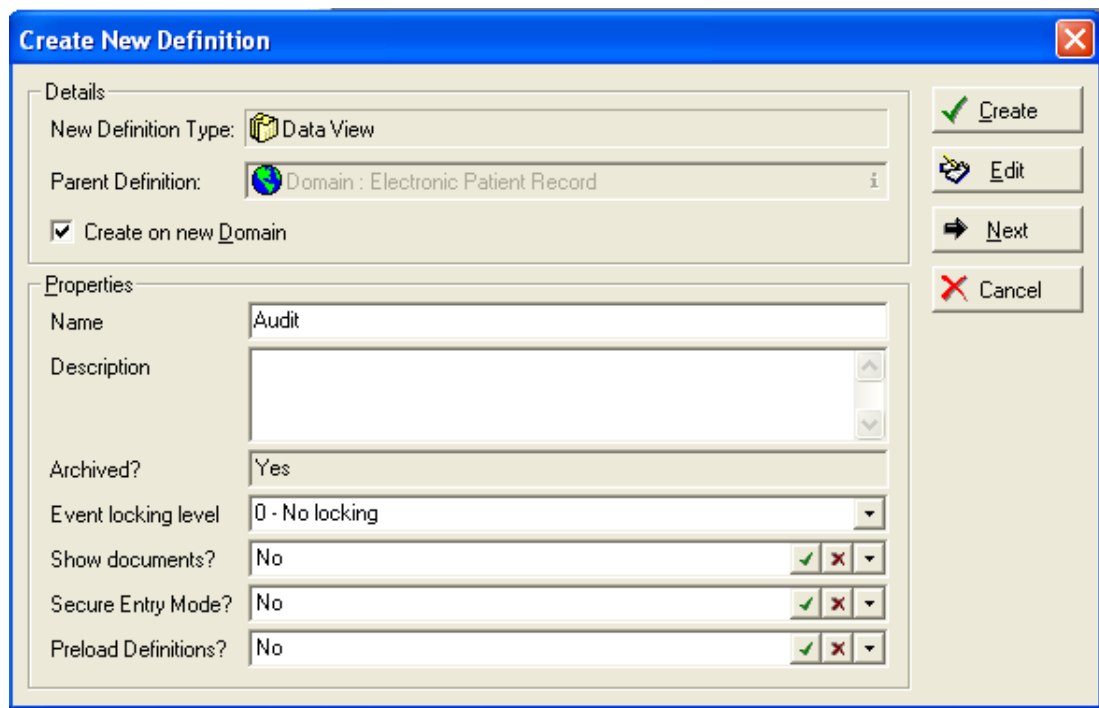
1.17 Define a Data View on a new Domain

You can define a new data view on a domain that doesn't yet exist. As you create the data view, a new domain of the same name will be created.

Close all open domains and data views.

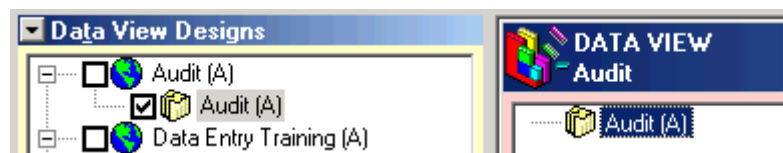
Go to the **Definition** menu and choose **New** then **Data view**.

On the **Create New Definition** window, name the data view **Audit** and select **Create on new Domain**. (Note that if you do not choose this option, the new data view will be created in the last active domain that was displayed).



Click **Create** to create the data view then click **OK** to the message **Open new data view definition?**

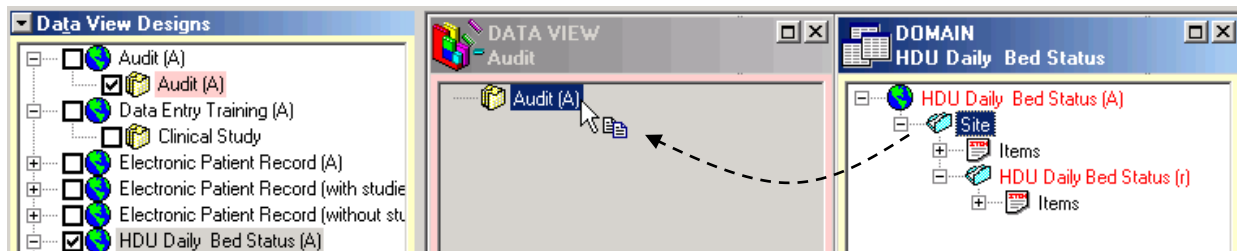
The **Audit** data view is listed in the data view designs navigation bar attached to a domain named **Audit**, and it is also displayed on the main screen.



Display the **HDU Daily Bed Status** domain.

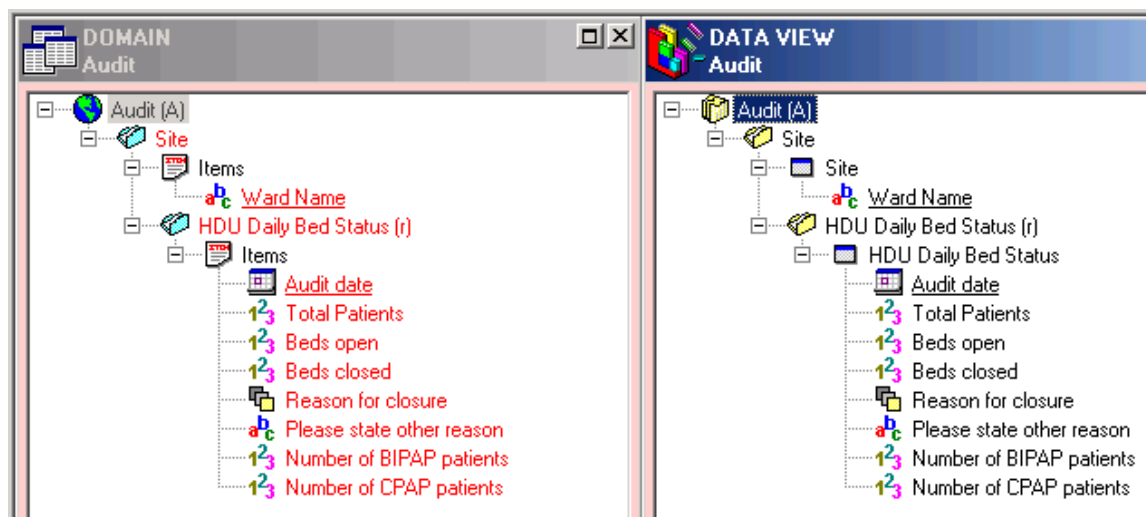
Copy the **Site** event from the **HDU Daily Bed status** domain into the **Audit** data view.

Choose to **Copy all child events** and then click **Create** to create the event view.



Display the **Audit** domain.

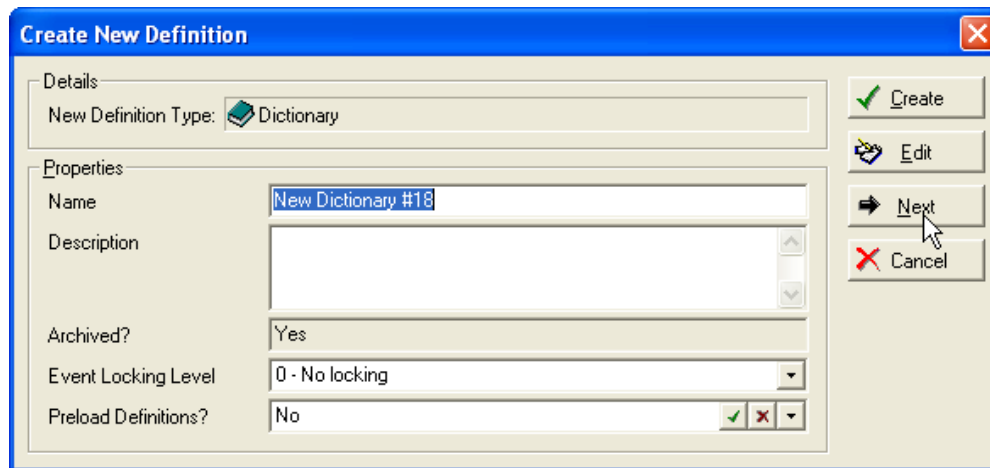
The Events and items have been attached both to the **Audit** data view and to the **Audit** domain.



2 DEFINING A DICTIONARY

Creating a new Dictionary is a similar process to creating a new Data View.

Go to the **Definition** menu and select **New** and then **Dictionary**,



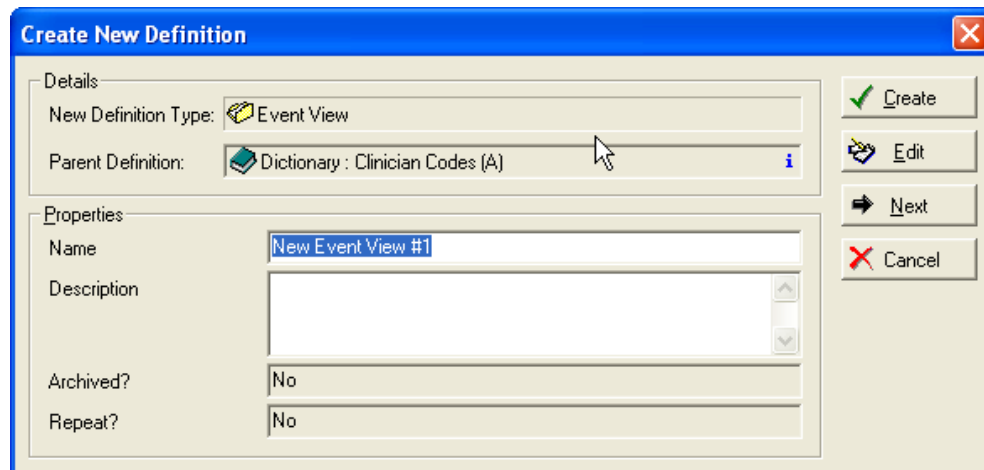
The 'Create New Definition' dialog box is shown. The 'Details' section has 'New Definition Type' set to 'Dictionary'. The 'Properties' section has 'Name' set to 'New Dictionary #18', 'Description' is empty, 'Archived?' is 'Yes', 'Event Locking Level' is '0 - No locking', and 'Preload Definitions?' is 'No'. On the right, there are buttons for 'Create', 'Edit', 'Next', and 'Cancel'. The 'Next' button is highlighted with a mouse cursor.

Name the Dictionary **Clinician Codes** and then press the **Next** button

The new Dictionary Domain is created automatically when you create the new Dictionary.

Notice that the Designs window now changes to list the Dictionary Domains and Dictionaries in the database rather than the Data Domains and Data Views.

You are now prompted to create the Root Event View for the dictionary.

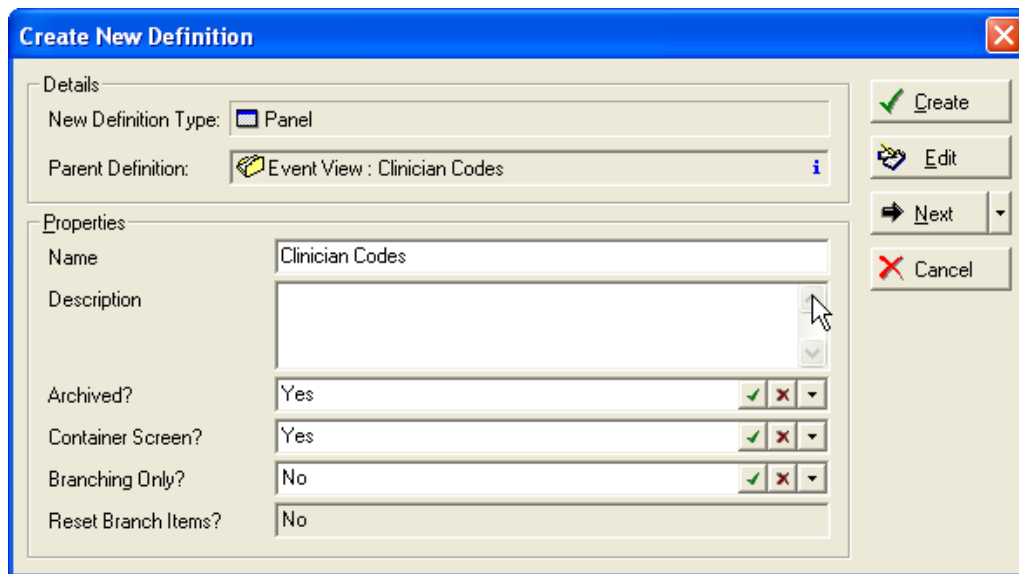


The 'Create New Definition' dialog box is shown. The 'Details' section has 'New Definition Type' set to 'Event View' and 'Parent Definition' set to 'Dictionary : Clinician Codes (A)'. The 'Properties' section has 'Name' set to 'New Event View #1', 'Description' is empty, 'Archived?' is 'No', and 'Repeat?' is 'No'. On the right, there are buttons for 'Create', 'Edit', 'Next', and 'Cancel'. The 'Next' button is highlighted with a mouse cursor.

Type in the name **Clinician Codes** and press the **Next** button.

The core definitions in the Dictionary Domain objects are automatically created when you create the Dictionary objects.

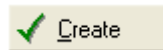
You are next prompted to create a panel. Also call this **Clinician Codes** and press the **Next** button.

The image shows a 'Create New Definition' dialog box. It has a 'Details' section with 'New Definition Type' set to 'Panel' and 'Parent Definition' set to 'Event View : Clinician Codes'. The 'Properties' section has 'Name' set to 'Clinician Codes', 'Description' is empty, 'Archived?' is 'Yes', 'Container Screen?' is 'Yes', 'Branching Only?' is 'No', and 'Reset Branch Items?' is 'No'. On the right, there are buttons for 'Create' (with a green checkmark), 'Edit' (with a pencil icon), 'Next' (with a right arrow icon), and 'Cancel' (with a red X icon).

The next item prompted for is a Panel Item. Create a text item with the name **Clinician Code**, this will be your identifier item.

Press the **Another** button and create another text item, called **Clinician Name**. This will be your meaning item in the dictionary.

Now press the **Create** button



You can now view your Dictionary and your Dictionary Domain that you have created.

Unarchive the **Clinician Code** and **Clinician Name** items. Open the Dictionary Domain definition and set the **Clinician Code** item as the identifier.

You can add further items to the dictionary in the same way as you would do in a Data View.

To go back to the view of Data Views, select **Data View Design** from the drop down list in the left-hand pane entitled **Dictionary Designs**.



Or select **Data View Design Mode** from the toolbar.

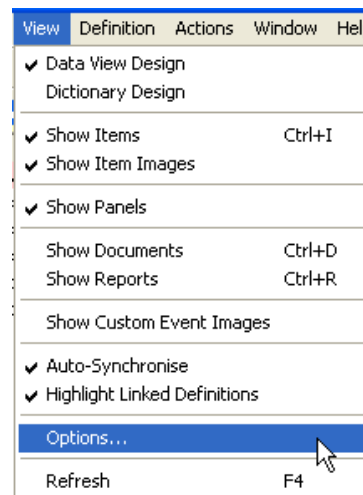


3 SETTING DESIGN MANAGEMENT VIEWING OPTIONS

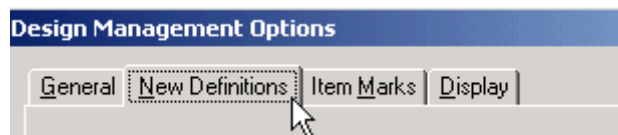
There is a range of options that can be set to control the display and behaviour of the Design Management screen. For example you can control the display of item images, whether the **Create New Definition** window prefixes definition names with **Linked to** and **Based on** etc, and whether the New Definition window is displayed at all when you are creating new definitions. You can also control the colours of different parts of the Design Management window.

This exercise will deal with prompt messages on creating and copying definitions. For full details and explanation of all the options, see Appendix 1.

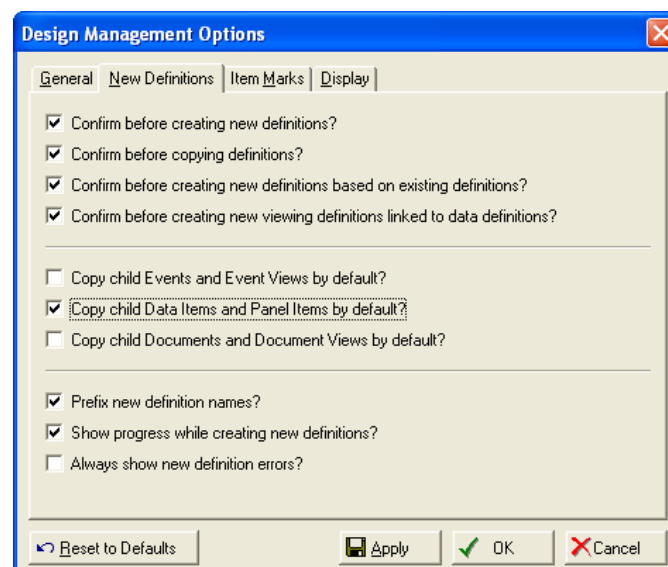
Go to the **View** menu and choose **Options ...**



Select the **New Definitions** tab.



A range of options controls the behaviour of InfoFlex as events and items are copied. (See Appendix 1 for full explanation).



Remove the tick from **Confirm before creating new definitions?**

This means that the **Create New Definition** window will not be displayed when you create new items

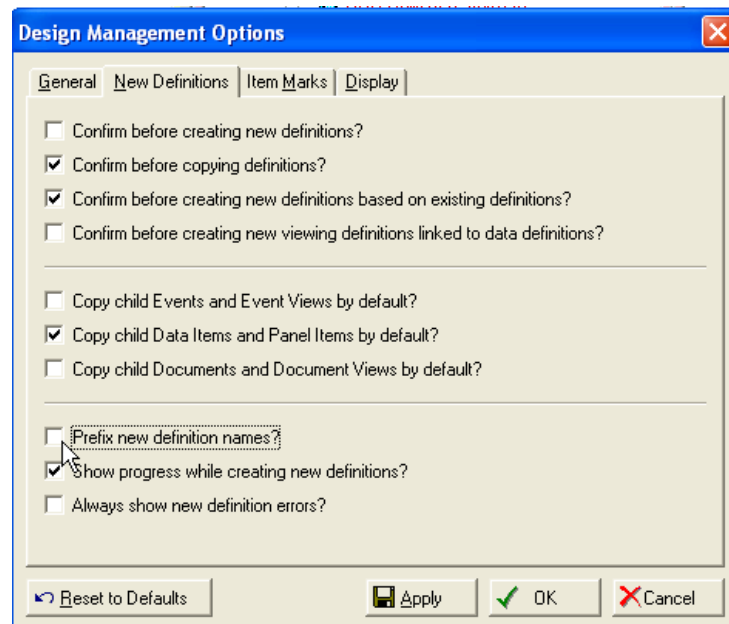
Remove the tick from **Confirm before creating new viewing definitions linked to data definitions?**

This means that the Confirm New Definition window will not be displayed when you copy items from a domain into a data view.

Note however that if the confirmation window is not displayed, you will not be able to change whether child events and items are copied, and you will not be able to change the item name before copying. You will also not be able to open the definition window immediately on creation of the definition.

Remove the tick from **Prefix new definition names?**

This means that new events and items will **not** be prefixed with **Copy of**, **Based on** or **Linked to**.

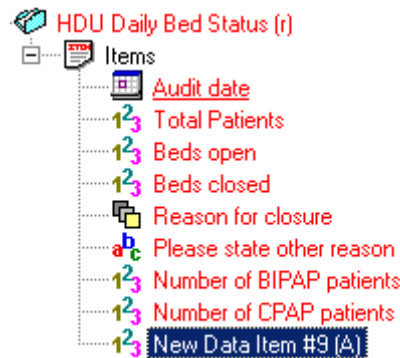


Click **OK** to save these changes and close the **Options** window.

In the **Audit** domain, go to the **HDU Daily Bed Status** event and create a new value item called **Number of staff**.

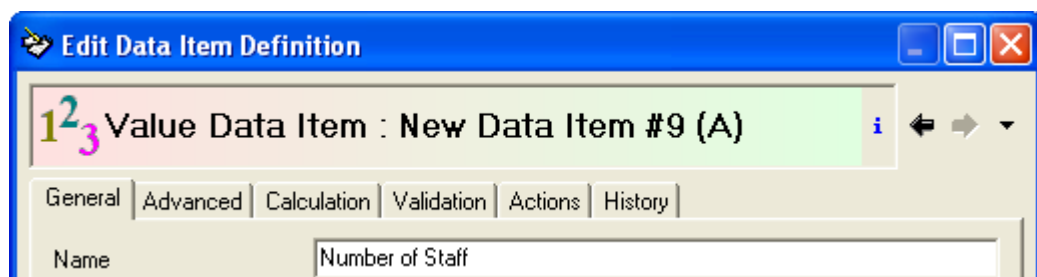
Note that when you first create the item there is no confirmation window, so you can't name the item straight away. The item is given a default name.

To switch the confirmation box back on for creating new items, you may wish to switch on the **Confirm before creating new definitions?** option on the **Options** menu.



Double click the new item to display the item definition.

Name the item **Number of staff** then save and close the item definition.



Copy the **Number of staff** item into the **HDU Daily Bed Status** event in the **Audit** data view.

The item is copied straight away with no confirmation message, and is not prefixed with **Linked to**.

Close the **Audit** domain and data view and display the **Electronic Patient Record** domain and the **Bronchoscopy** data view.

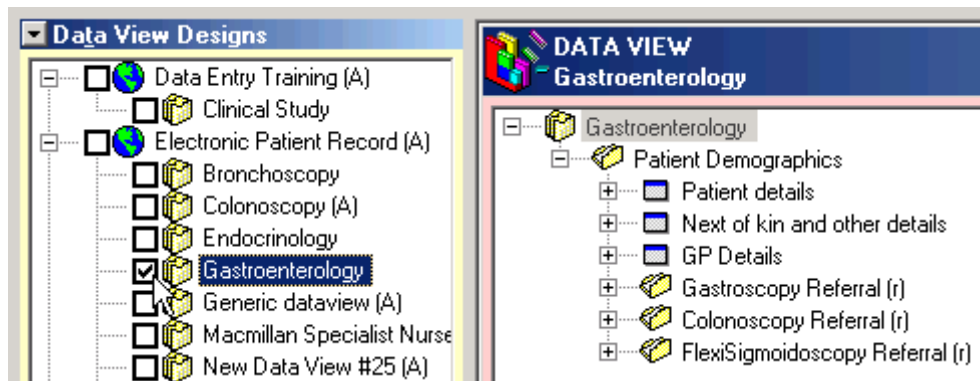
Copy the **Admission** event from the **Electronic Patient Record** domain into the **Bronchoscopy** data view.

The event is copied straight away with no confirmation message and the event is not prefixed with **Linked to**. However, there is no opportunity to select whether to copy child events or items. All the child items are copied across since that is the option set on the **Options** window, but no child events were copied.

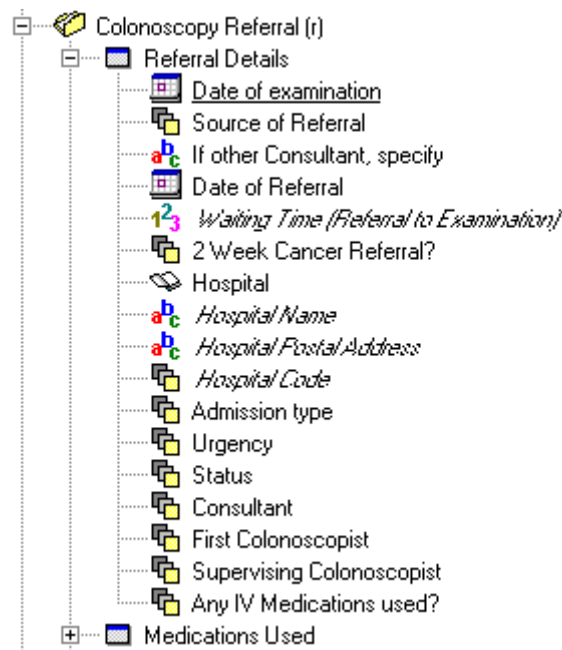
4 BRANCHING ITEMS

4.1 Creating a Branching item

Close the open domain and data view, and open the **Gastroenterology** data view in the **Electronic Patient Record** domain.



Expand the **Colonoscopy Referral** event, then expand the **Referral details** panel.



Open the item definition for **Any IV Medications used?**

Go to the **Branching** tab

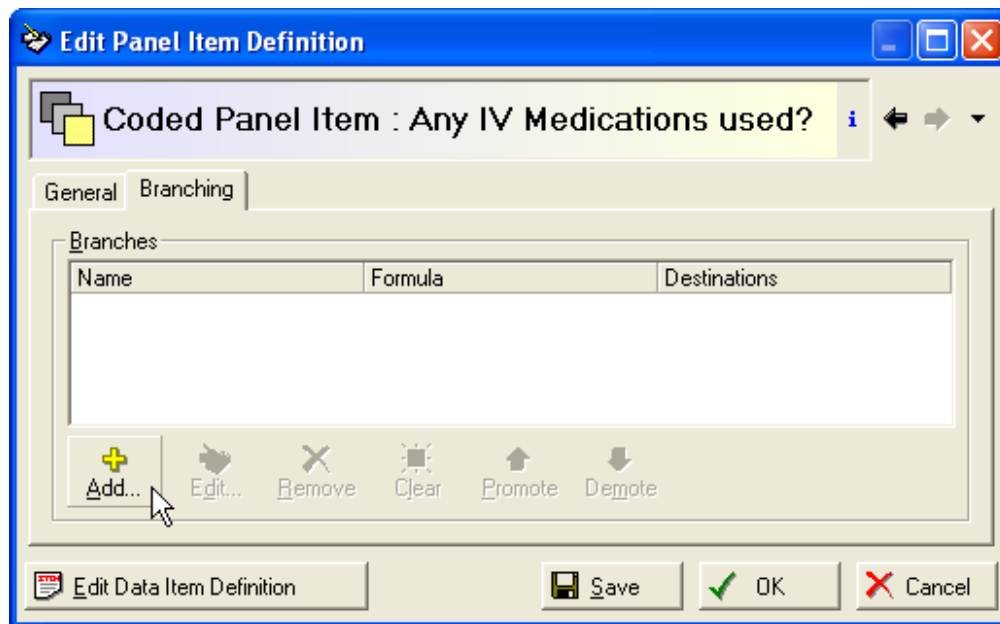
This tab lists all the sets of branching criteria which are set up for this item.

There are three elements to any branch:

The **Name** distinguishes one branch from another, since any item can have more than one branch set up.

The **Formula** is the criteria which will cause this particular branch to branch.

The **Destinations** are the item(s) and/or panel(s) which are branched to if the criteria are met.

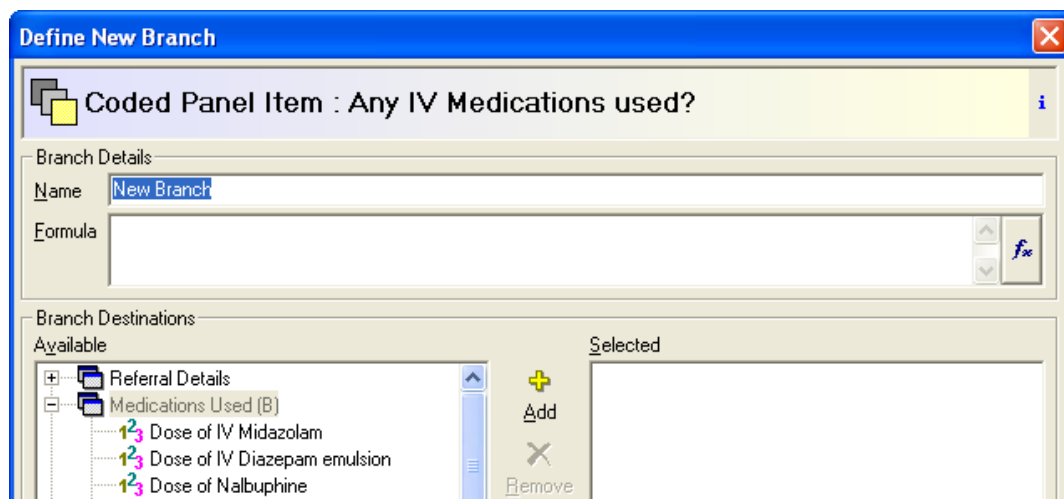


Press the **Add...** button.

The **Define New Branch** window is displayed.

The branching criteria will be displayed in the **Formula** box in the Branch Details section.

The panel or item branched to will be displayed in the **Selected** box of the **Branch Destination** section of the screen.

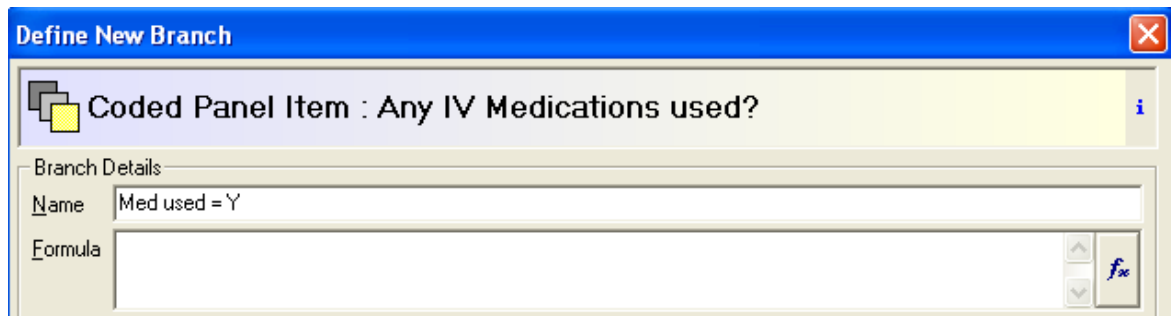


4.2 Defining the Branch

Giving the branch a name

In the Branch Details section of the screen, set the **Name** to **Med used = Y**. This gives a name to this particular branch criteria and destination.

Branches are given names in order to distinguish them if several branches are set up on one item.



Set the branching criteria

Press the **fx** button (Edit formula). This will enable you to set up the branching criteria.

Click in the **Item/Value** box to display a dropdown list.

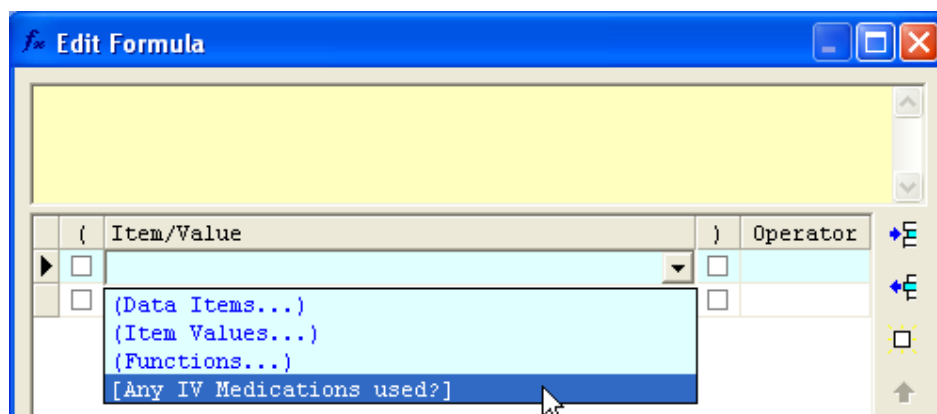
(Data Items...) displays a list of items in the current event and parent events, which could be included in the formula.

(Item Values...) allows you to enter an appropriate value for the item if you wish to specify a value that may have been entered in the item. (The item name must already have been included in the formula). For example, for coded items, **Item Values...** will display the list of codes in the chosen item, or for dates, the date picker will be displayed.

(Functions...) allows you to select a function for use in the formula (eg, max, min, percent, now).

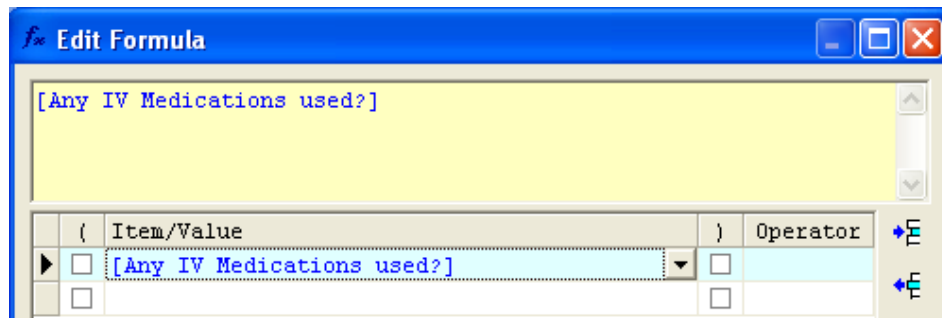
[Any IV Medications used?] is the item that the branch is being created on, and it is displayed in the list since it is likely to be used in the formula.

Select **[Any IV Medications used?]**.

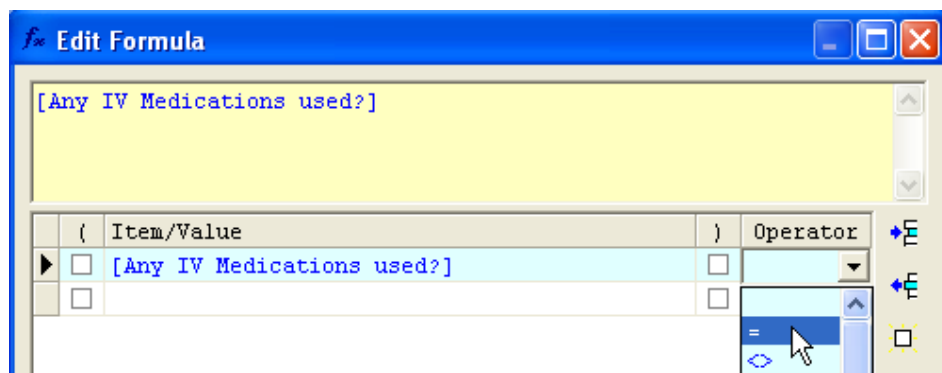


The item name selected is displayed in the yellow area at the top of the Edit Formula window.

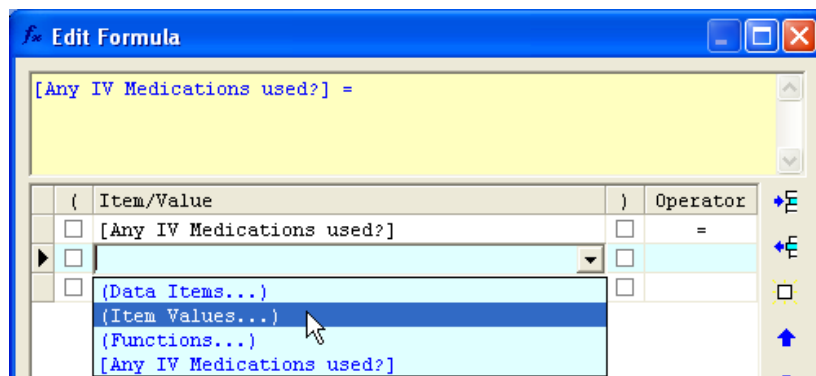
The name is also displayed in the **Item/Value** column.



On the same row, click in the **Operator** column to display a dropdown list and select the equals sign.

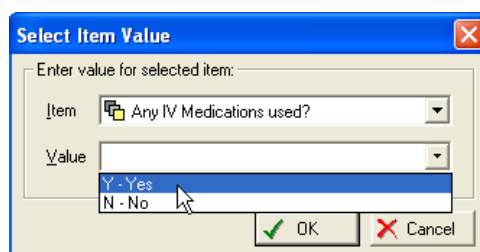


On the second row, click in the **Item/Value** column and choose **(Item Values...)**.



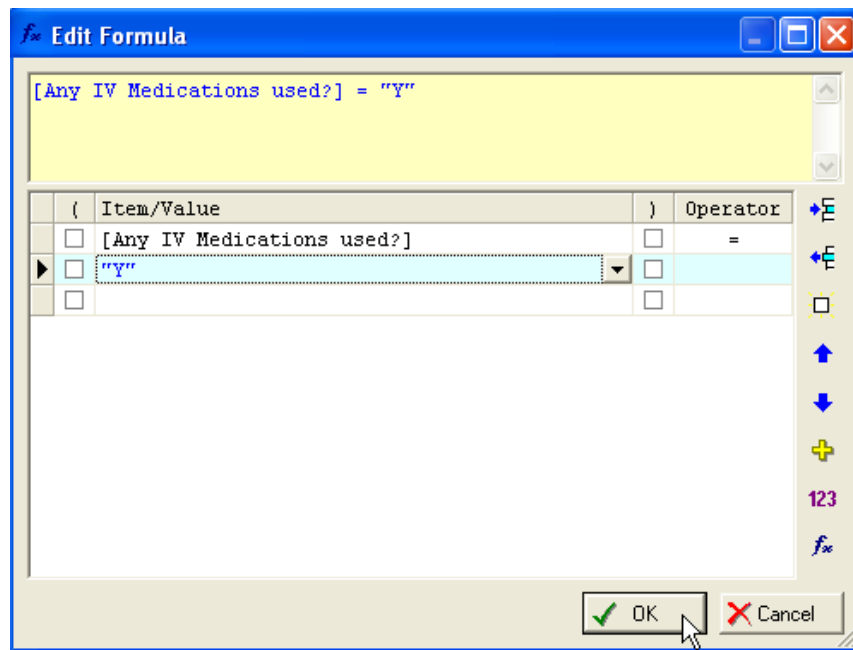
A **Select Item Value** window is displayed stating the name of the item you have just selected in the formula, and the codes that are defined in that item.

In the **Value** box, choose **Y – Yes**.



Click **OK**.

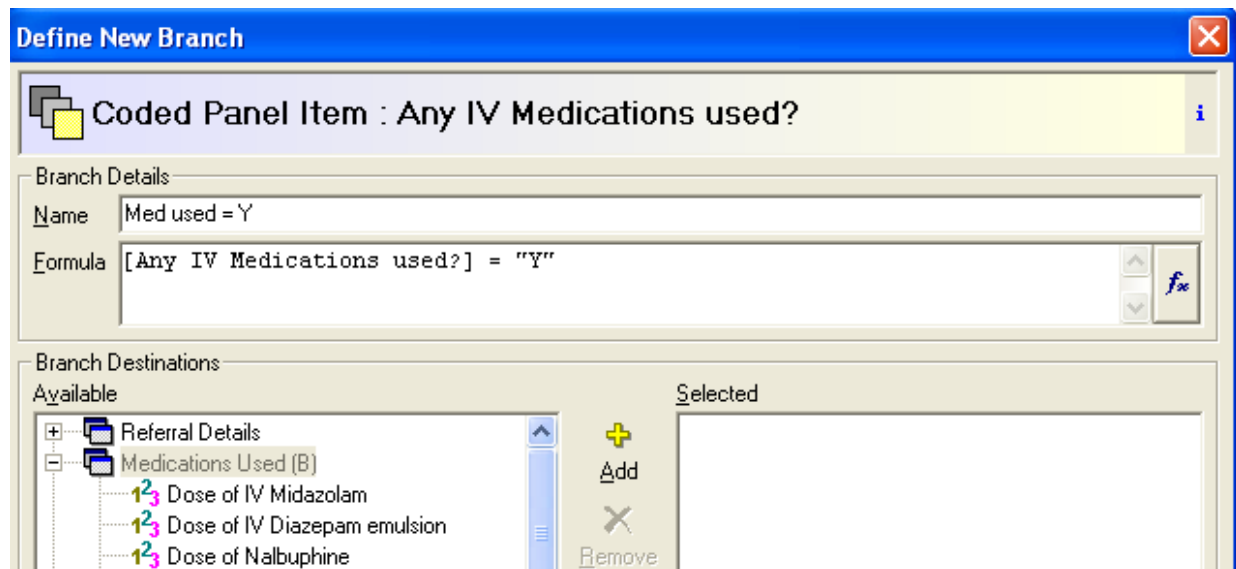
All the elements of the formula are displayed in the yellow area at the top of the window. The formula is displayed in blue instead of red to indicate that it is logically complete.



Note that complex formula involving more than one item and several criteria linked with ands and ors can now be set as branching criteria.

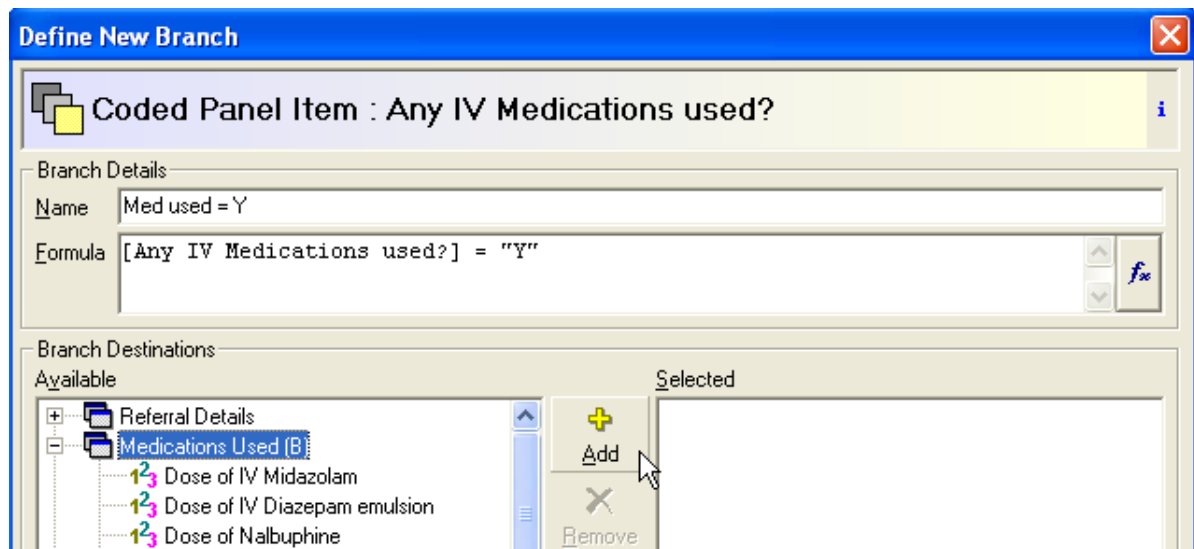
Press OK to close the **Edit Formula** window.

The formula is displayed in the Formula box in the Branch Details section. The formula is the criterion which will prompt the branching to occur in Data Entry.

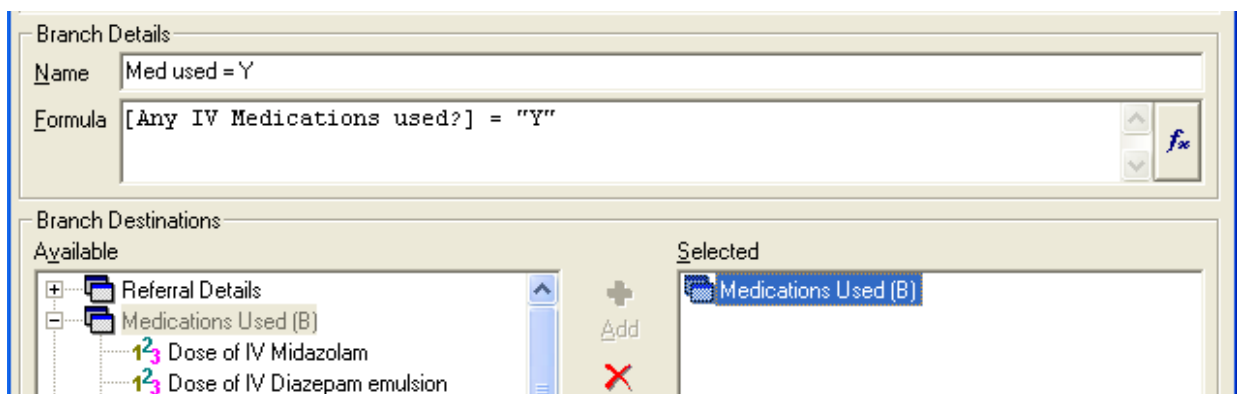


Set the branching destination

In the **Available** box of the **Branch Destinations** section, select the **Medications Used** panel then press the **Add** button.



Medications Used is displayed in the **Selected** box.



Note that you can select any number of branching destinations, which would be displayed in sequence in Data Entry.

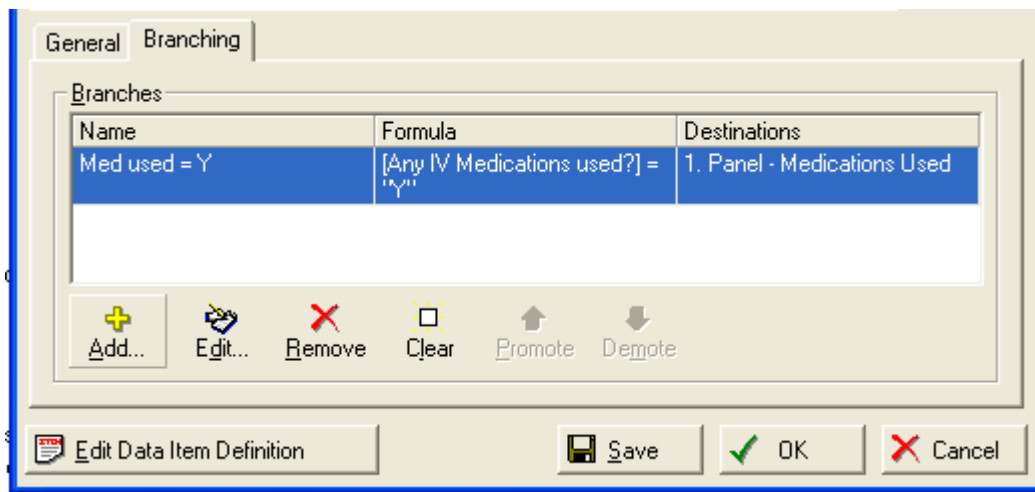
Press **OK** to return to the **Branching** tab of the item definition.

A summary of the branch is listed on the **Branching** tab.

The **Name** column lists the name given to the branch.

The **Formula** column displays the branching criteria.

The **Destinations** column displays the branching destination.



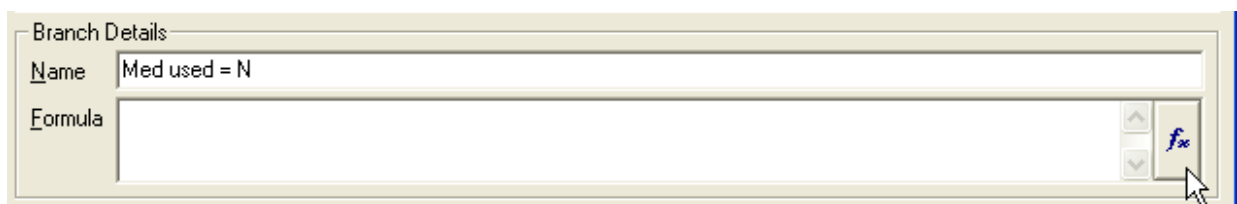
4.3 Defining a second branch on the same item

Press the **Add** button again, to set up another branch for this item.

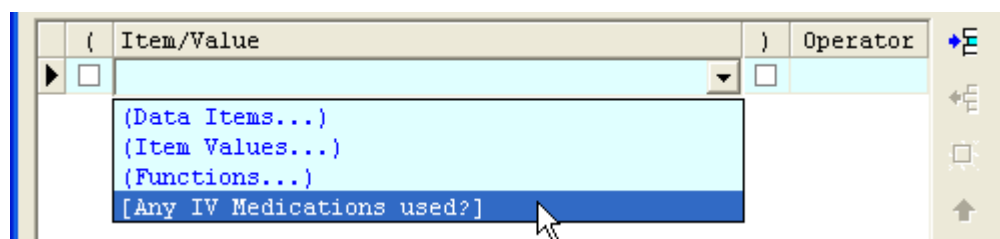
In the **Name** box, set the name to **Med used = N**.

Branches are given names in order to distinguish them if several branches are set up on one item.

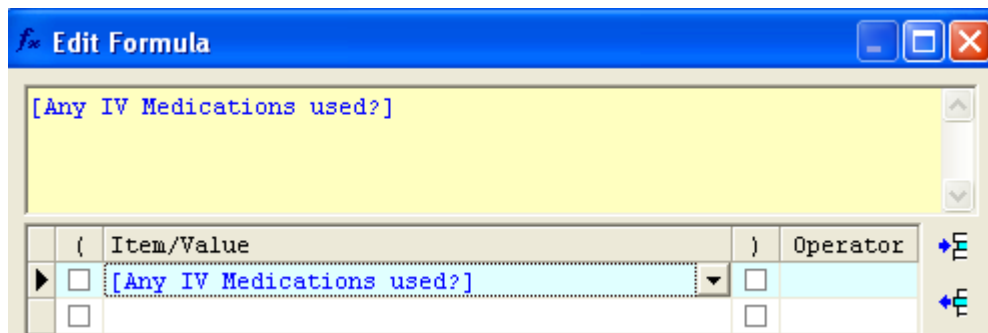
Press the **fx** button (Edit formula).



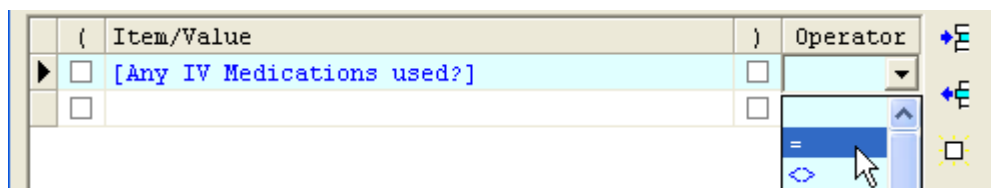
Click in the **Item/Value** box to display a dropdown list, and choose **[Any IV Medications used?]**.



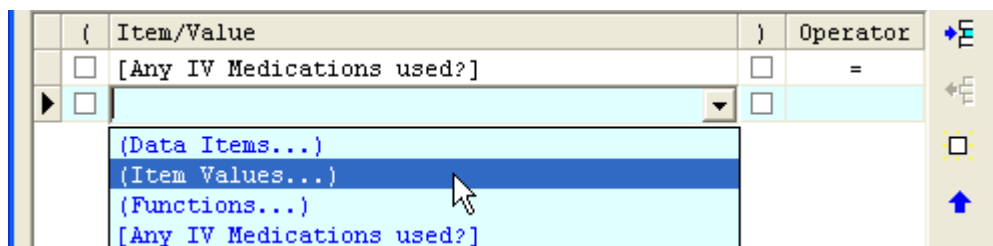
The item name is displayed in the yellow area at the top of the **Edit Formula** window and in the **Item/Value** column.



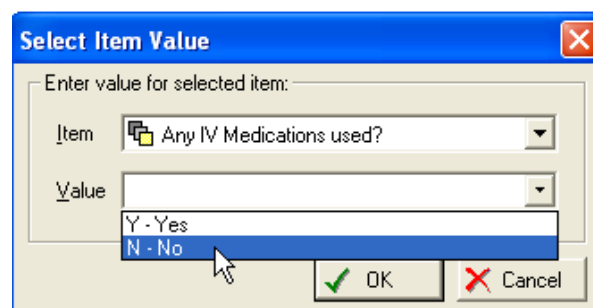
Click in the **Operator** column to display a dropdown list and select the equals sign.



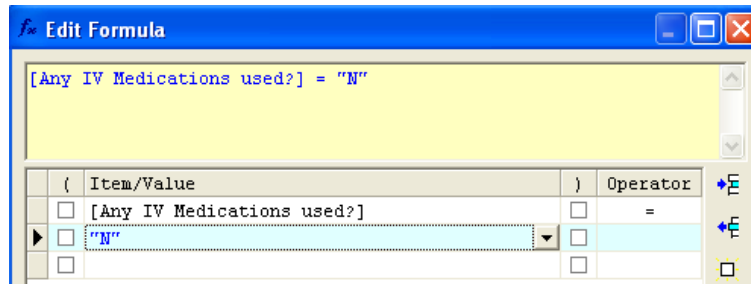
On the second row, click in the **Item/Value** column and choose **(Item Values...)**.



On the **Select Item Value** window, choose **N – No** then press **OK**.

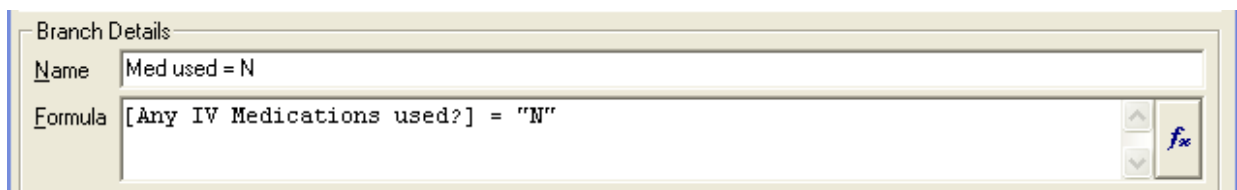


The completed formula is displayed in the **Edit Formula** window.



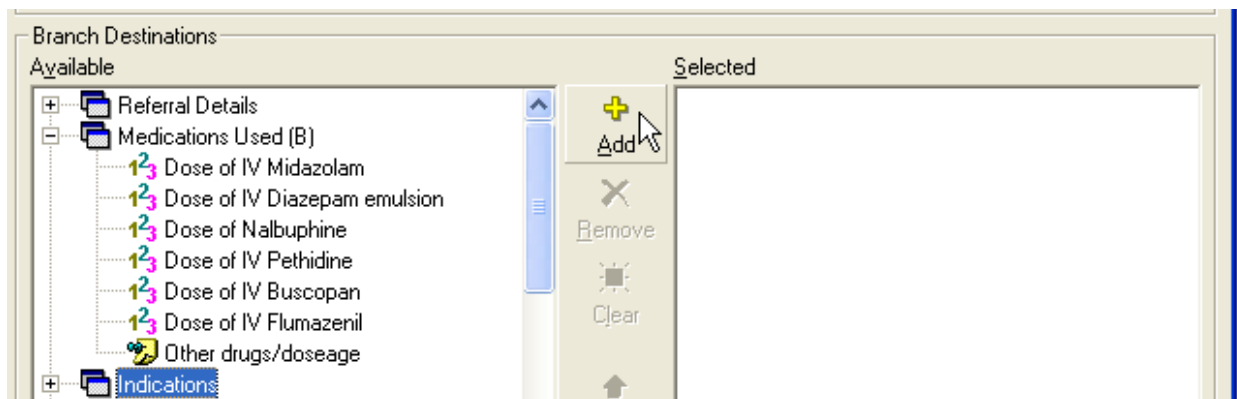
Press **OK** to close the **Edit Formula** window.

The formula is displayed in the Formula box in the Branch Details section. The formula is the criterion which will prompt the branching to occur in Data Entry.



Set the branching destination

In the **Available** box of the **Branch Destinations** section, select the **Indications** panel then press the **Add** button.

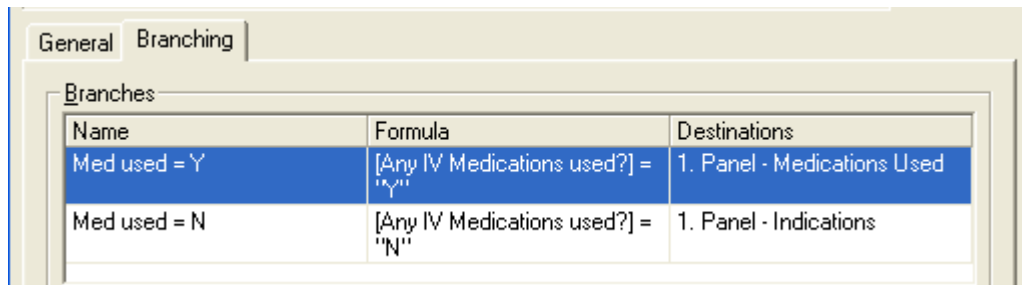


Indications is displayed in the **Selected** box.



Press **OK**.

A summary of all the branches is listed on the **Branching** tab.



Name	Formula	Destinations
Med used = Y	[Any IV Medications used?] = "Y"	1. Panel - Medications Used
Med used = N	[Any IV Medications used?] = "N"	1. Panel - Indications

Press **OK** to save and close the item definition.

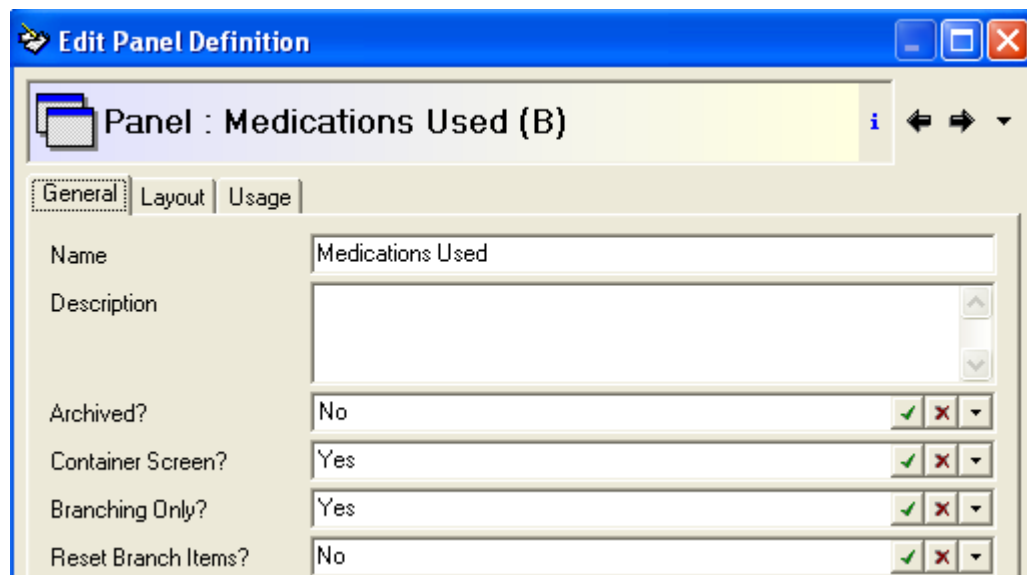
4.4 Setting panel properties for Branching destinations

If you wish panels that have been set as branching destinations only to be available when the branching criteria have been fulfilled, you must set the **Branching Only** property on the panel definition. If you do not set this property, Data Entry users will have access to the panel regardless of whether the branching criteria have been fulfilled.

Open the Panel definition for **Medications Used**.

Set **Branching Only?** to **Yes**.

This will ensure that the panel will only be available in Data Entry if the branching criteria you have just set up are fulfilled.



Panel : Medications Used (B)	
Name	Medications Used
Description	
Archived?	No
Container Screen?	Yes
Branching Only?	Yes
Reset Branch Items?	No

Click **OK** to save and close the panel definition.

The **Indications** panel was also defined as a branching destination. In this case we shall leave the **Branching only** property for **Indication** set to **No**, which means that the panel will be available should the branching criteria be fulfilled, in addition to being available during the normal course of data entry.

Reset Branch Items? – This option is only applicable to **Branching Only** panels. It defines what will happen when the data that allowed the branching panel to be reached is changed so

that the branch is no longer accessible. If all the conditions that lead to a branch become no longer true, and the branch can no longer be reached then when **Reset Branch Items** is set to **Yes**, all the data in that branch will be deleted. The default for **Reset Branch Items** will always be **No** to ensure that the property has to be explicitly set to true. So by default, the data in the branch remains unchanged if the conditions that lead to a branch become false.

When **Reset Branch Items** is **Yes**, the data in the branching only panel is not deleted if the data items are still accessible from some other place. For example, if the branching only panel can be accessed from another item whose branching condition is still true.

5 RULES ABOUT ARCHIVING

- ♦ **When you archive an event in the domain, it will cause all its linked event views to behave as if they are archived, even though they are not marked as archived.**

Similarly for item and panel items, document and document views, domains and data views, etc.

If archiving an event did cause all linked event views to be marked archived, there would be no way of determining which event views might have been archived before you archived the event. This would mean you wouldn't know which of the linked event views to unarchive when you unarchived the event.

- ♦ **Any newly created object is automatically archived.**

This ensures that users don't see changes in Data Entry before they are completed. If newly created objects were not automatically archived, users would see changes as they occurred and would have access to incompletely defined objects.

- ♦ **The root event of a data view, or domain cannot be archived.**

If the root event was archived but the corresponding domain or data view was not, Data Entry users would be able to select a data view which did not have a root event visible and therefore was therefore not usable.

Archiving a root event therefore has the same effect as archiving a domain or data view. In order to archive the root event a user must therefore archive the whole domain or data view.

- ♦ **An event identifier item or panel item cannot be archived**

If the identifier item was archived and the event was not then an event of that type could be created in Data Entry but the identifying data could never be entered so the event could never be saved.

Archiving an identifier item therefore has the same effect as archiving an event or event view. In order to archive the identifier item, a user must therefore archive the whole event or event view.

- ♦ **A domain cannot be unarchived until a primary identifier has been set.**
- ♦ **A data view cannot be unarchived until it contains a root event with a primary identifier.**
- ♦ **An event cannot be unarchived until an identifier has been set.**
- ♦ **An event view cannot be unarchived until it contains an identifier.**

There is one exception to this rule which is where the identifier is auto-generated. In this case the identifier does not need to exist in the event view since it will be generated automatically.

6 RULES ABOUT DELETING

6.1 Rules about deleting definitions

Domain (data) definitions

- Data definitions cannot be deleted from a domain if a linked definition exists in a data view.
- Data definitions cannot be deleted from a domain if there is data present.
- Events can only be deleted if child events are deleted first.
- The primary identifier item in the domain cannot be deleted. You should either delete the entire domain or clear the item from being the identifier.
- Event identifiers cannot be deleted. You should either delete the entire event, or clear the item from being the identifier.

Data view (viewing) definitions

- Viewing definitions can be deleted whether or not there is data in them.
- Event views can only be deleted if child event views are deleted first.

6.2 How to delete definitions

- To delete any definition, right click that definition and choose Delete Definition. Prompt messages will explain why you are not allowed to delete the definition or if you are allowed, will give you the option whether or not to continue. A details button will display details of any child definitions which are also being deleted.
- An entry is recorded in the Audit Trail when a definition is deleted.

6.3 Rules about deleting data

Deleting in Design management

- Data cannot be deleted from a data view, only from a domain.
- Data can be deleted at the item, event, or domain level.
- When deleting from an event or domain, you can choose to delete data from some or all studies, or to permanently delete the data from the database.
- When deleting data from an item, the data will be permanently deleted from the database.
- Deleting data from an event will result in the deletion of data from all child events.
- Data deleted in Design Management is not recorded in the Audit Trail.

Deleting in Data entry

- Users must be granted permission to delete data.
- Data can be deleted at the event level or the subject level.

Deleting if no studies have been implemented.

When a patient is deleted from a data view, then they will no longer be found in any data view, however they will still exist in the domain. A domain search will find the patient that has been deleted. On re-registering a patient in a data view, the data in the top-level event will be returned, but none of the child events will be returned.

Deleting an event will result in all child events and documents being deleted. A prompt message will give you the option whether or not to continue. A details button will display details of any child events and documents which are also being deleted. Where there are child events and documents that are not visible in the current data view, deletion of the parent event is not allowed unless the **Delete Hidden Events** property in the data view definition is set to **Yes**.

Deleting if studies have been implemented.

When a patient or event is deleted from a data view, then they are removed from all the studies that are represented in that data view. However the subject and their events may still be available in another data view if they belong to a different study that is represented in the other data view. A domain search will find the patient that has been deleted. On re-registering a patient in the data view that you deleted them from, the data in the top-level event will be returned, but none of the child events will be returned.

This is explained further in a separate tutorial about Studies.

6.4 How to delete data

Design management

Select the item, event or domain you wish to delete data from. On the **Actions** menu, choose **Delete Data**. A prompt message will give you the option whether or not to continue.

Data entry

To delete an event, in the subject overview, right click the event you wish to delete and select **Delete**. A prompt message will illustrate the event and any child events that will be deleted, and give you the option whether or not to continue. Note that the **Delete Hidden Events?** option set in the data view definition controls whether child events not visible in the current data view will be deleted (see below section 7.1.3).

To delete a subject, select that subject so that the subject overview is displayed in Data Entry. From the **Subject** menu select **Delete subject**. A prompt message will confirm which subject is to be deleted and give you the option whether or not to continue.

7 DATA VIEW DEFINITION PROPERTIES

The properties listed in this section are set in the data view definition and apply to the whole data view.

7.1 General tab

7.1.1 Event Locking

Event locking allows you to detect when an event is being viewed/edited by another user and prevent two users from editing the same event for a particular subject at the same time, e.g. when two users are editing the same patient demographic details. When the event (data or document) is selected in Data Entry, the user is notified of any existing lock on that event.

Four levels of locking are provided and they are set either in the domain or the data view definition. NOTE: If the domain property is set, this will override any data view setting.

The four levels of event locking are:

- 0 - No locking
- 1 - Lock and do not allow viewing
- 2 - Lock and allow read-only viewing
- 3 - Lock and allow edits.


Open the event definition for the **Gastroenterology** event in the Data View

The screenshot shows the 'Edit Data View Definition' window for the 'Gastroenterology' data view. The window has a title bar 'Edit Data View Definition' and a tabbed interface with tabs: General, Interfacing, Study List, Action List, Pathway List, Query List, Summary Groups, Summary Views, and History. The 'General' tab is selected. The 'Data View : Gastroenterology' header is visible. The 'Name' field is 'Gastroenterology'. The 'Description' field is empty. The 'Archived?' field is 'No' with a green checkmark and a red X icon. The 'Base Domain' field is 'Electronic Patient Record (with studies)'. The 'Event Locking Level' field is '0 - No locking'. The 'Show Documents?' field is 'No' with a green checkmark and a red X icon. The 'Delete Hidden Events?' field is 'No' with a green checkmark and a red X icon. The 'Secure Entry Mode?' field is 'No' with a green checkmark and a red X icon. The 'Spell Check Behaviour' field is '0 - None'. The 'Preload Definitions?' field is 'No' with a green checkmark and a red X icon. The 'Default Filter Date Range' field is 'None'. The 'Subject Summary URL' field is empty with a green arrow icon.


Event locking is preset to **0 – No locking**,

Change to **Event locking level to 2 - Lock and allow read-only viewing** this is the most commonly used option and allows a subsequent user to view (but NOT change) a subject's details if the subject is already in use by another user.

When event locking is being used, there is a padlock symbol at the top of the screen, document event, or grid column. This flashes for 10 seconds when the level is '**Lock and allow read-only viewing**', and flashes continuously for editable events.

Referral Details 	
Date of examination	11/04/2006
Source of Referral	SV - Surveillance
If other Consultant, specify	
Date of Referral	

Click **this padlock button** to see details of the user that locked the event. Once clicked, the button stops flashing.

Referral Details 	
'Colonoscopy Referral (11/04/2006)' is being edited, and is read only.	
User: system, Computer: 00000-PC01	Time: 18/07/2006 14:56:48

When the event lock level is '**Lock and do not allow viewing**', then the event is not displayed, and the screen will display the details of the user that locked the event.

'Gastroscopy Referral (03/07/2003)' is being edited - unable to display	
Locked by:	system
From computer:	000005-PC01
Locked at:	05/09/2006 15:42:05

7.1.2 Show Documents

This option is the same as selecting the **Show Document definitions** from the main toolbar and if set to **Yes** allows the user to see all reports/documents that have been defined in the data view.

If set to **No**, documents are not initially visible in Data Entry, but can be switched on using the **Show Documents definitions** button on the Data Entry toolbar.

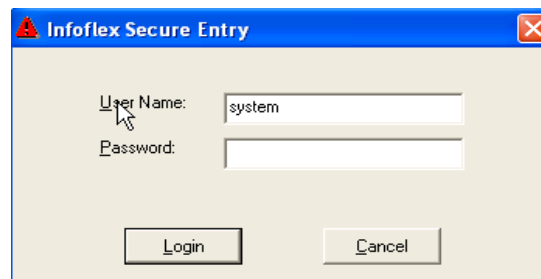
7.1.3 Delete Hidden Events

If set to **Yes**, the user is allowed to delete an event even though there may be child events and documents attached that are not visible in the current data view.

If set to **No**, the user is prevented from deleting an event that has child events and documents that are not visible in the current data view.

7.1.4 Secure Entry Mode

This option requires the user to enter their username and password every time data is saved if the **Secure Entry Mode** option is set to **Yes**.



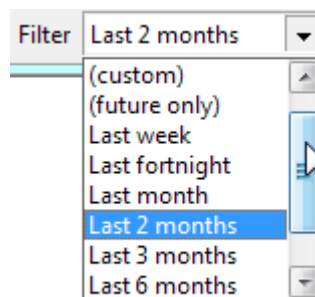
By default the option is switched to **No**.

7.1.5 Preload Definitions

When **Preload Definitions** is set to **Yes** this will preload all of the definitions (i.e. event views, events, panels, panel items, items, document views, documents, document items) for the selected Data View when the Data View is first entered in the Data Entry module. This has the advantage that once the user is in the Data View, then moving from event to event or panel to panel is much quicker, because the definitions are not being repeatedly loaded. However it may take a little longer when first selecting the Data View from the drop down list or going into the Data Entry module in the first place.

7.1.6 Default Filter Date Range

This option sets the initial value of the Subject Overview filter in Data Entry. The default value is None which means that no filter is initially applied to the subject overview. The user can change the subject overview filter at any time.



7.1.7 Subject Summary URL

This is the URL of a specially-configured web application. This would use InfoFlex data portal widgets to show a subject summary screen. If a URL is specified here, the subject summary screen will be shown instead of the Data Entry screen when a subject is first selected in Data Entry. If no URL is specified here, Data Entry behaviour is unchanged.

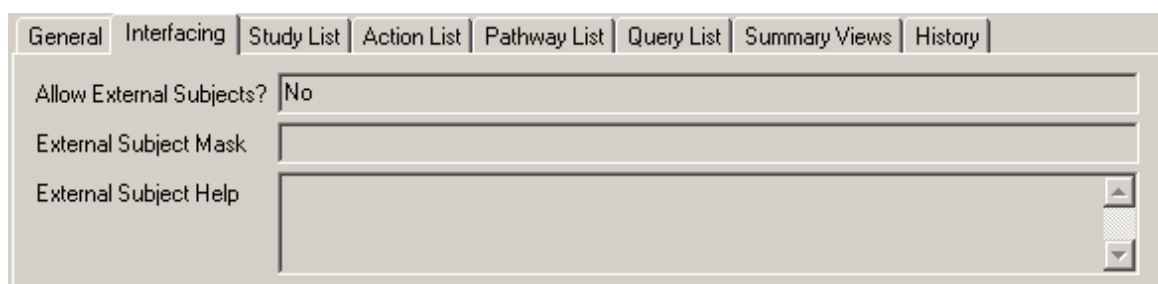
7.2 Interfacing tab

Where a domain is interfaced, this tab enables the ability to add external subjects to a domain to be available on a single Data View only.

Note that if the Domain allows external subjects, then ALL Data Views still allow them. Setting the Data View property **AllowExternal** to **False** does not override the Domain property if the Domain **Allow External** property is set to **True**.

The properties on the Interfacing tab in the data view definition override the properties set in the Domain definition if the **Allow External** subjects property in the domain is set to **False**.

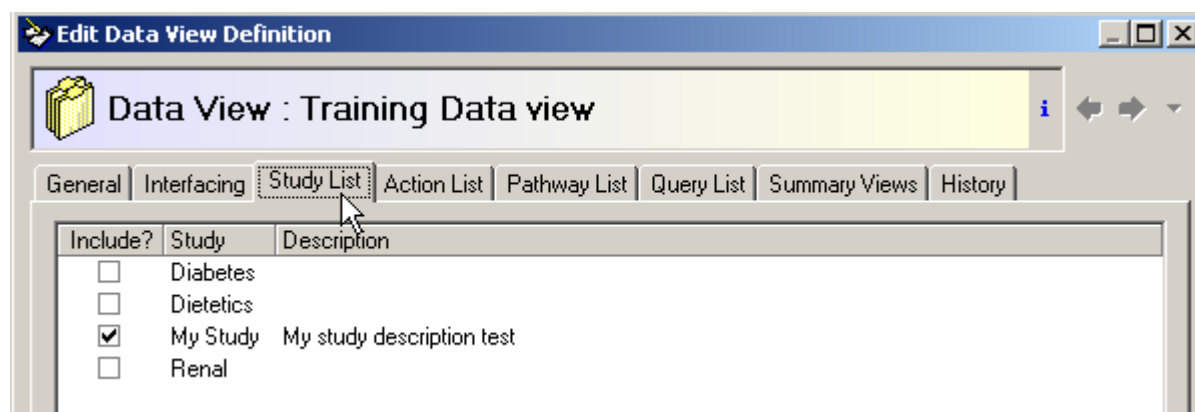
These properties are only available if the Domain is interfaced.



The screenshot shows the 'Interfacing' tab of a dialog box. It contains three fields: 'Allow External Subjects?' with a dropdown menu set to 'No', 'External Subject Mask' with an empty text box, and 'External Subject Help' with a large empty text area and a vertical scrollbar on the right.

7.3 Study List tab

The Studies List tab contains a list of the studies that have been defined in the domain definition. See the separate **Studies tutorial** document for information about Studies and how to use this tab.

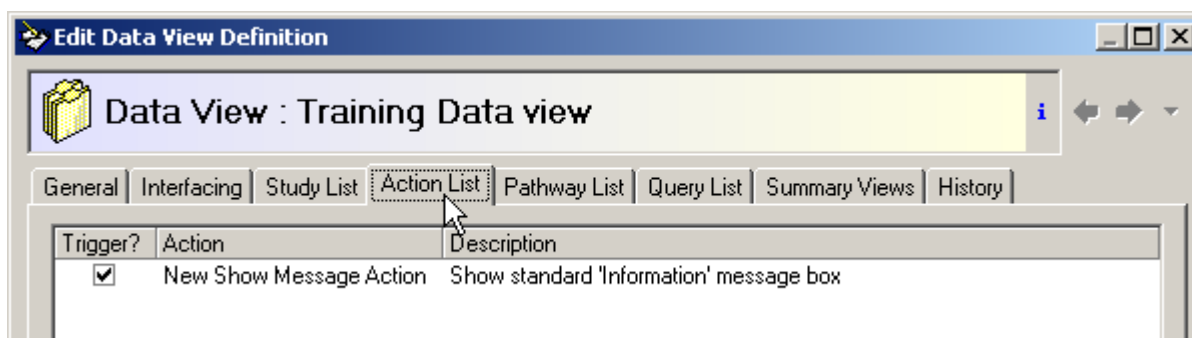


The screenshot shows the 'Study List' tab of the 'Edit Data View Definition' dialog. The title bar reads 'Edit Data View Definition'. The main title is 'Data View : Training Data view'. Below the title bar are several tabs: 'General', 'Interfacing', 'Study List' (which is selected and has a mouse cursor over it), 'Action List', 'Pathway List', 'Query List', 'Summary Views', and 'History'. The 'Study List' tab contains a table with the following data:

Include?	Study	Description
<input type="checkbox"/>	Diabetes	
<input type="checkbox"/>	Dietetics	
<input checked="" type="checkbox"/>	My Study	My study description test
<input type="checkbox"/>	Renal	

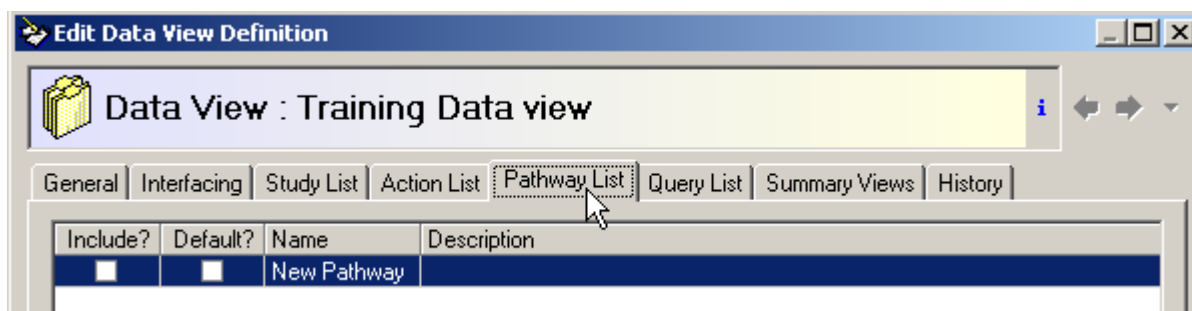
7.4 Action List tab

The Actions List tab contains a list of the actions that have been defined in the domain definition. See Appendix 2 below for information about Actions and how to use this tab.



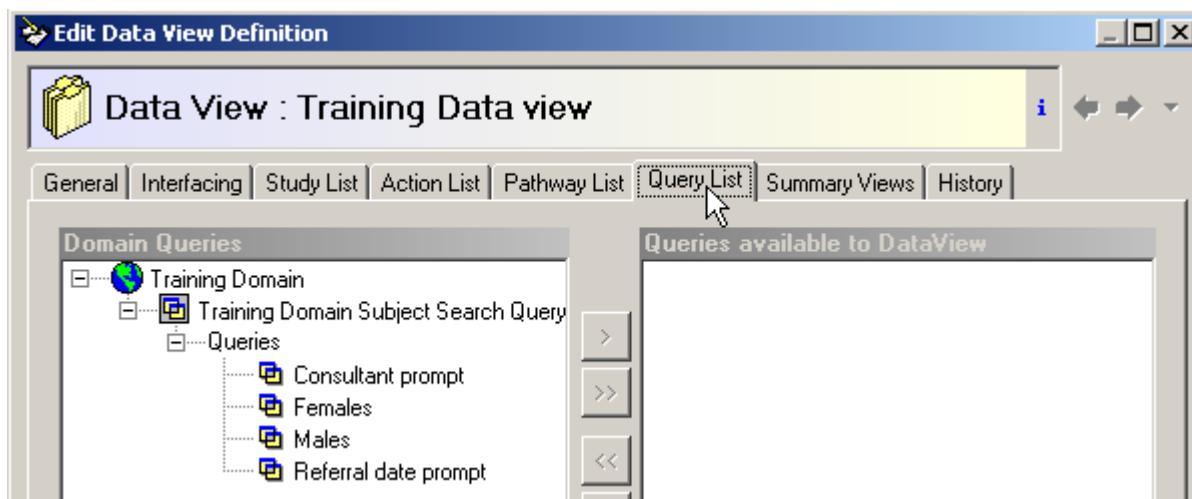
7.5 Pathway List tab

The Pathways List tab contains a list of the Pathways that have been defined in the domain definition. See the separate **Pathway Viewer tutorial** document for information about Pathways and how to use this tab.



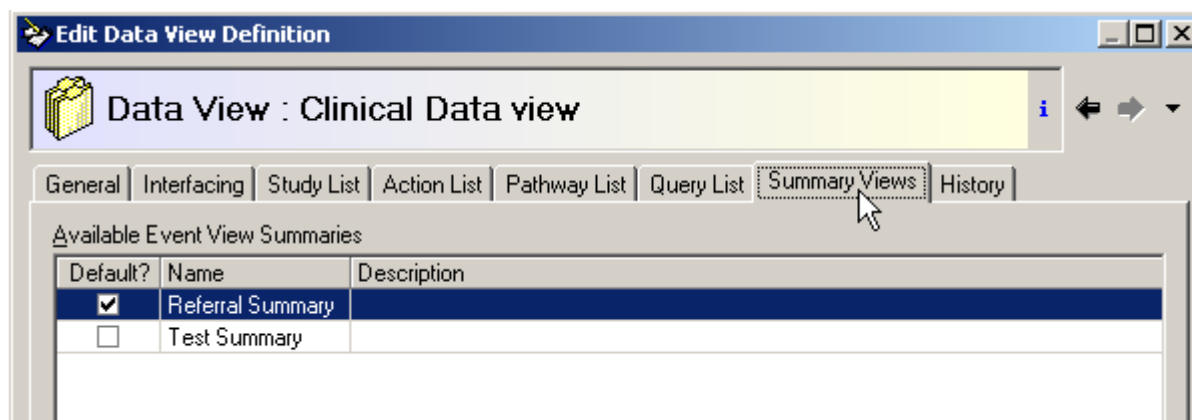
7.6 Query List tab

The **Query List** tab is used to select subject search queries. See **Appendix 3** below for information about subject search queries and how to use this tab.



7.7 Summary Views tab

The **Summary Views** tab is used to define summary views for use in the Work List and Data Entry modules. See the separate **Work List and Patient Tracking module tutorial** document for information about summary views and how to use this tab.



8 ADVANCED EVENT FUNCTIONALITY

8.1 Event Auto-creation

The **Event Auto-creation** function allows you to automatically create an event in Data Entry when certain criteria are fulfilled.

Terminology

The event which causes an event to be created is known as the **Trigger event**.

The event that is created is also known as the event that is **triggered**.

The definition of the event auto-creation is made in the Trigger event on the **Auto-create Events** tab. Any Auto-creations defined are also visible and editable on the Actions tab. Auto-creations can also be defined on the **Actions** tab.

Auto-creation can also be referred to as **Auto-generation**.

Rules

You can specify any criteria on which the event can be triggered, involving one or more items from the Trigger event or a parent of the Trigger event.

You can specify any child or sibling event of the Trigger event to be auto-created. The event triggered does not have to belong to any particular data view.

Repeat events can be auto-created and you can specify the value of the identifier item.

A trigger event can trigger more than one event, using the same criteria, or different criteria.

Event auto-creation is defined in the domain, not in the data view.

Elements of an event auto-creation

There are 4 elements to event auto-creation.

A **Name** is the name given to each auto-creation action. Each event can cause any number of different events to be triggered, with different criteria.

The **Expression** is the criteria which when met will create the event.

Execute determines when the event is created – on saving or first saving the trigger event.

The **Action** is the event that is created.

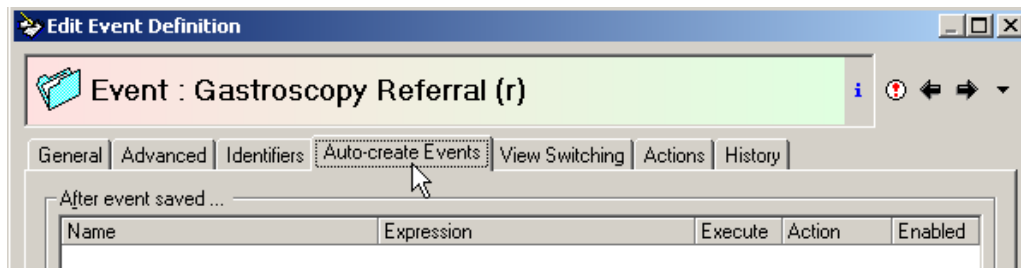
Enabled shows whether the auto-creation is enabled or disabled.

Name	Expression	Execute	Action	Enabled
After event saved ...				

Display the **Electronic Patient Record** domain.

Open the event definition for **Gastroscopy Referral**.

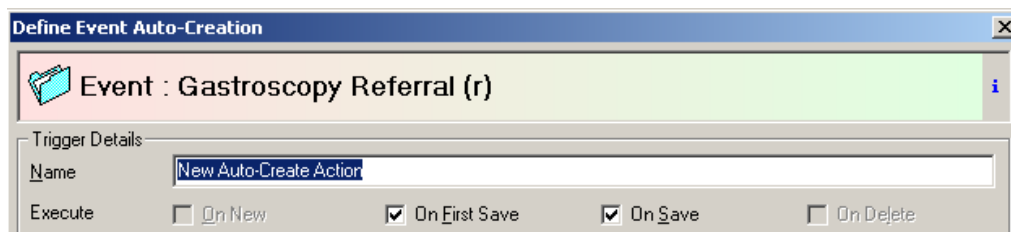
Go to the **Auto-create Events** tab.



Press the Add... button to add an event auto-creation.

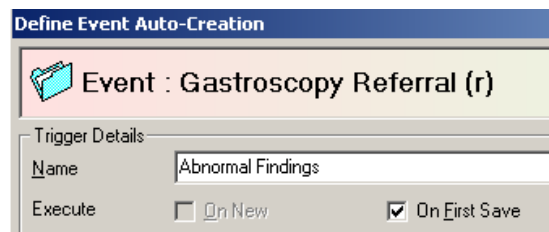


The **Define Event Auto-Creation** window is displayed.



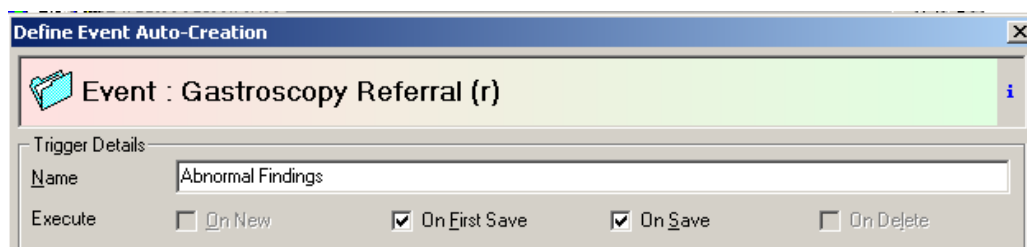
Name

In the **Name** box, type over **New Auto-creation Action** and enter the name **Abnormal Findings**.



Execute

It is possible for an event to be auto-created when the action event is saved for the first time (**On First Save**) or when the action event is subsequently saved i.e. on every save except the first one, (**On Save**). An event can also be auto-created on both these criteria.



Note that if you choose to auto-create an event **On Save**, then if the event being auto-created is non-repeat, it will only be created once, no matter how many times the event is saved. So if the event already exists, it will not be recreated. It will only be created if it does not already exist.

If you choose to auto-create a **repeat** event **On Save**, then a new instance could potentially be created every time the triggering event is saved. If you choose to auto-create a repeat event, you must specify a value or formula which will automatically be entered in the event identifier item (see below). The event will not be auto-created if an event with the same identifier already exists. However, care should be taken not to define a formula which will result in multiple unwanted instances of the event to be created. Eg, if your formula specifies today's date and an event with today's date has already been created, then a new instance will not be auto-created. However if your formula specifies today's date and time, then a new instance of the event will be created on each save since the time will be different each time you save the event.

If you choose to auto-create an event **On First Save**, it will only be created when the triggering event is first saved. If the auto-created event is cancelled or has been deleted for some reason, then it will not be recreated on subsequent saves unless the auto-creation is also set to occur **On Save**.

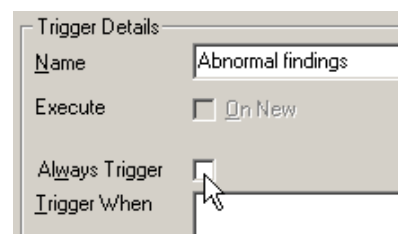
Expression

The **Expression** is the criteria which when met will create the event.

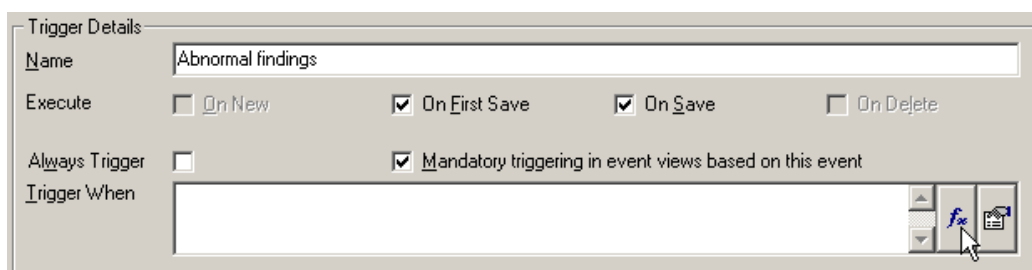
You can choose to **Always Trigger** the event. This means that no specific criteria need to be met (apart from the type of save specified in the Execute). When the event in which the auto creation is defined is saved by the execute method specified, the event set in the Action details box will be created.

If you wish to specify specific criteria which must be met in order for the event to be created, remove the tick from the **Always Trigger** box. The **Trigger When** box is then enabled.

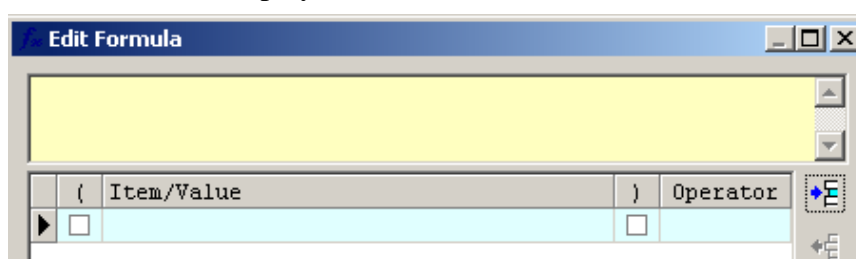
Remove the tick from the **Always trigger** box.



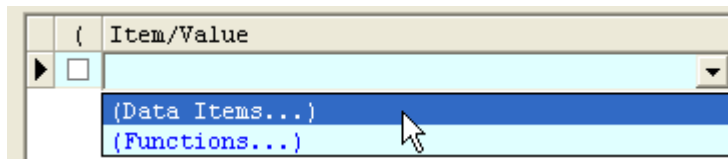
Press the **fx** button in the **Trigger When** box.



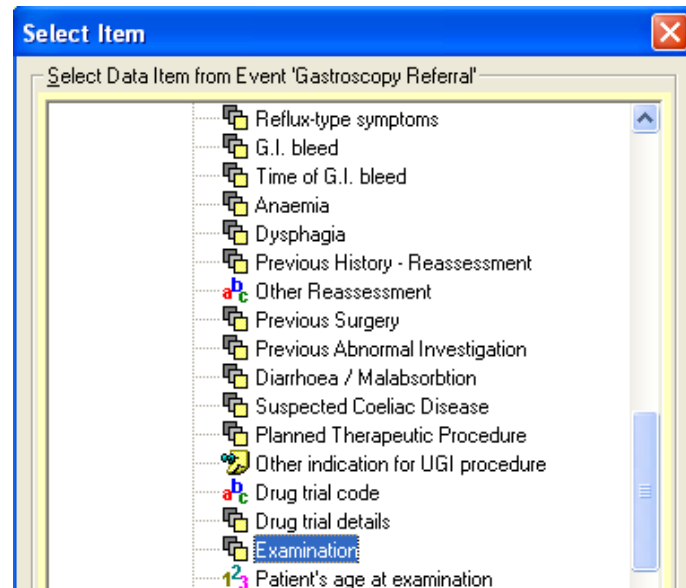
The **Edit formula** window is displayed



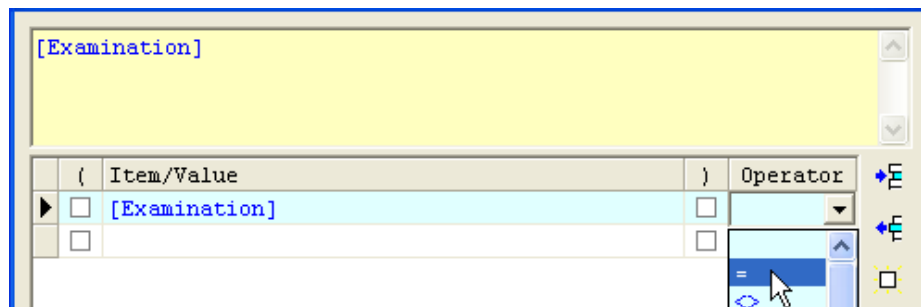
In the **Item/Value** column, choose **(Data Items...)**.



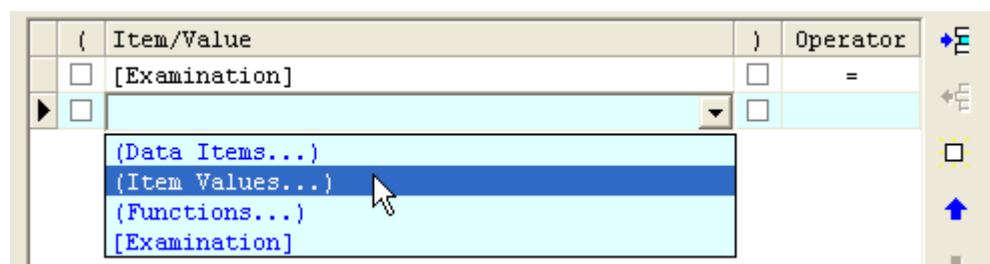
In the **Select Item** window, select the **Examination** item in the **Gastroscopy Referral** event, then press **OK**.



In the **Operator** column, select =



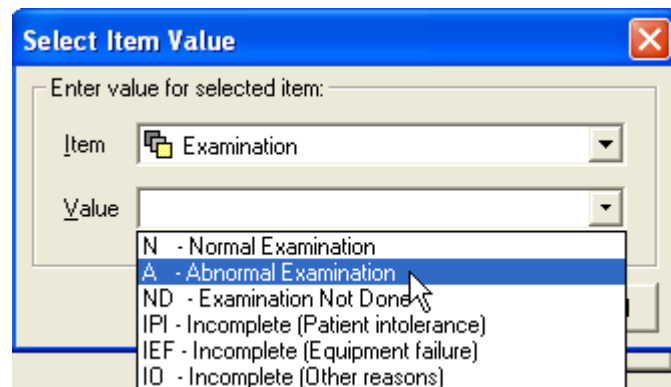
In the **Item/Value** column, on the next row select **(Item Values...)**.



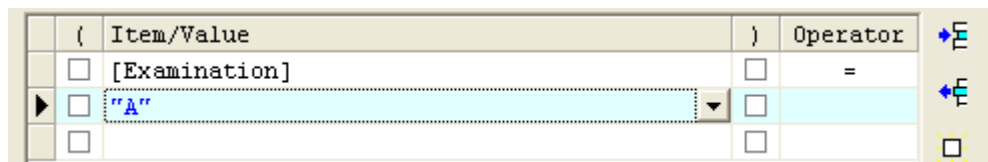
The **(Item Values...)** option displays a **Select Item Value** window which allows you to select one of the values which would be entered in an item in Data Entry.

The **Select Item Value** box displays the **Examination** since that item has been included in the formula.

The **Value** box displays the codes are available in the Examination item.



Select the **A – Abnormal Examination** code, then press **OK**.



Mandatory triggering in event views based on this event

This option controls whether the auto-creation carried out in all event views containing the triggering event view. If this option is ticked, then the auto-creation will always be carried out where the triggering event view exists in a data view.

Trigger Details

Name:

Execute: ☐ On New ☒ On First Save ☒ On Save ☐ On Delete

Always Trigger: ☐ ☒ Mandatory triggering in event views based on this event

Trigger When:

If this option is un-ticked, then the auto-creation will not be carried out in a data view unless you choose to switch it on in each data view which contains the triggering event view.

This example shows how auto-create event actions defined in an event are listed in an event view:

Edit Event View Definition

Event View : Gastroscopy Referral

General Study List Action List Item Availability History

Trigger?	Action	Description
<input checked="" type="checkbox"/>	Generate Abnormal Findings event if examination is abnormal	Generate new Event 'Abnormal Upper GI Findings'
<input type="checkbox"/>	Generate Mgt and Aftercare	Generate new Event 'Management & Aftercare'

This check box is disabled indicating that Mandatory triggering is set. The check box cannot be unticked and the action will always be carried out when criteria are met.

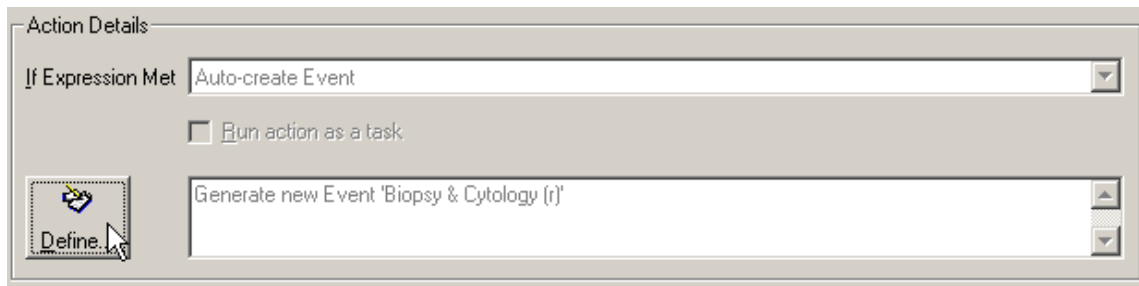
This check box is enabled indicating that Mandatory triggering is not set. You should tick the check box if you wish the action to be carried out in this data view.

Note: see the **Options** section below for details about an option controlling instances where the triggered event does not exist in the data view of the triggering event.

Action Details

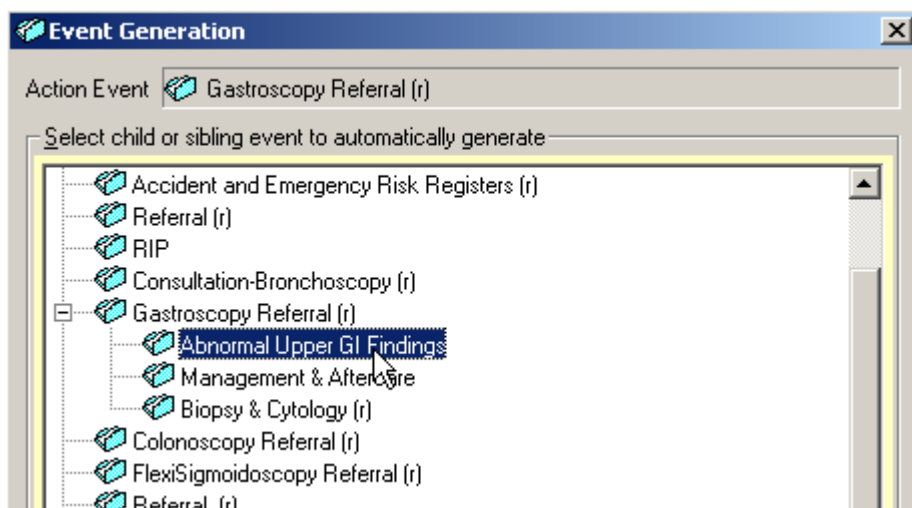
The event that is to be created is defined in the **Action Details** box.

Press the **Define** button in the **Action Details** section.



An **Event Generation** window is displayed which lists all the events in the domain it is possible to generate. Note that it is not limited to events within a particular data view, and that both repeat and non-repeat events can be generated.

Select the **Abnormal Upper GI Findings** event.

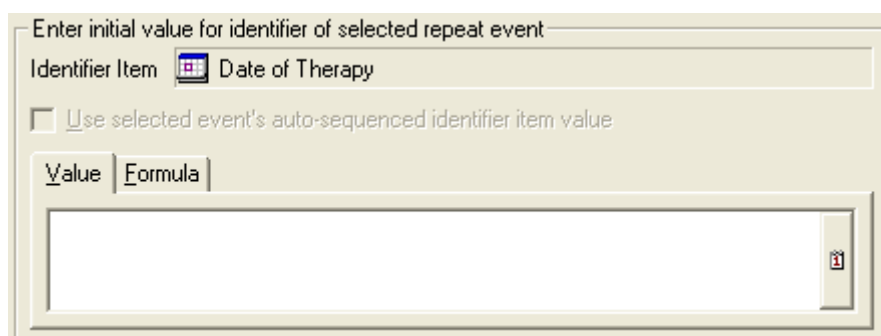


Auto-creating Repeat Events

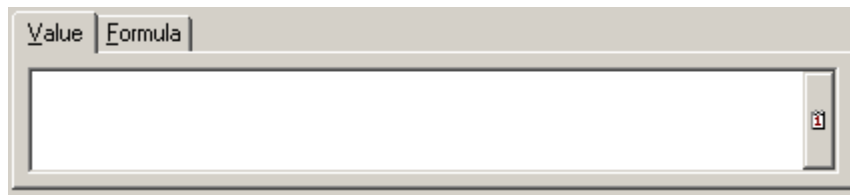
It is possible to auto-create repeat events. The repeat event can be a sibling or child repeat event, or another event of the same type as the trigger event.

If you choose to auto-create a repeat event you must specify the value to be entered in the identifier item of the repeat event. The value can either be a fixed value or a formula (eg today's date/time).

If you select a repeat event, the **Enter initial value for the identifier of selected repeat event** section becomes enabled.



If you wish to use a fixed value, simply enter the value on the **Value** tab. The tab displays a Data Entry field which requires the same format as in Data Entry (eg if the item is a date item, the standard date picker is available).

A screenshot of a software dialog box with two tabs: 'Value' and 'Formula'. The 'Value' tab is selected. Below the tabs is a large, empty rectangular text entry field. On the right side of this field, there is a small icon of a calendar, indicating a date picker.

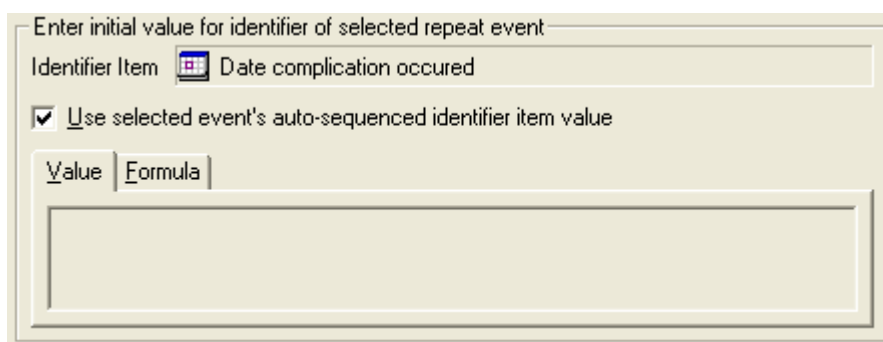
If you wish to use a formula (for example to insert today's date), select the **Formula** tab and create a formula in the usual way using the **Edit Formula** dialog.

A screenshot of the same dialog box, but with the 'Formula' tab selected. The text entry field is empty. To the right of the field, there are three buttons: a small square button with up and down arrows, a button with the text 'fx' (representing a formula), and a button with a document icon and a plus sign.

Note that if your formula results in a different value each time the triggering event is saved, then multiple instances of the repeat event will be created. For example, if the formula uses the function Now() for a date/time identifier item, and the event auto-creates On Save, then a new repeat event will be auto-created on each save.

Note also that when the auto-create action happens, if the identifier is already present in another instance of the repeat event, the auto-create action does not create a new repeat event. InfoFlex will only allow one event with a particular identifier to be created. So if the event already exists with that identifier, a new one will not be created.

If the identifier of the event being generated is auto-sequenced, the **Use selected event's auto-sequenced identifier item value** option is automatically enabled and ticked. If left ticked, the event's identifier will be auto-sequenced. If you do not wish to use the auto-sequenced value, untick the option and specify a value or formula as above.

A screenshot of a dialog box titled 'Enter initial value for identifier of selected repeat event'. It contains a label 'Identifier Item' followed by a small icon and the text 'Date complication occurred'. Below this is a checked checkbox with the label 'Use selected event's auto-sequenced identifier item value'. At the bottom, there are two tabs: 'Value' and 'Formula'. The 'Value' tab is selected, and below it is a large, empty rectangular text entry field.

Options

Three options can be set to control the behaviour of auto-created events.

Options

☒ Allow editing of auto-generated event before saving

☐ Only generate new event if associated event view exists in active data view

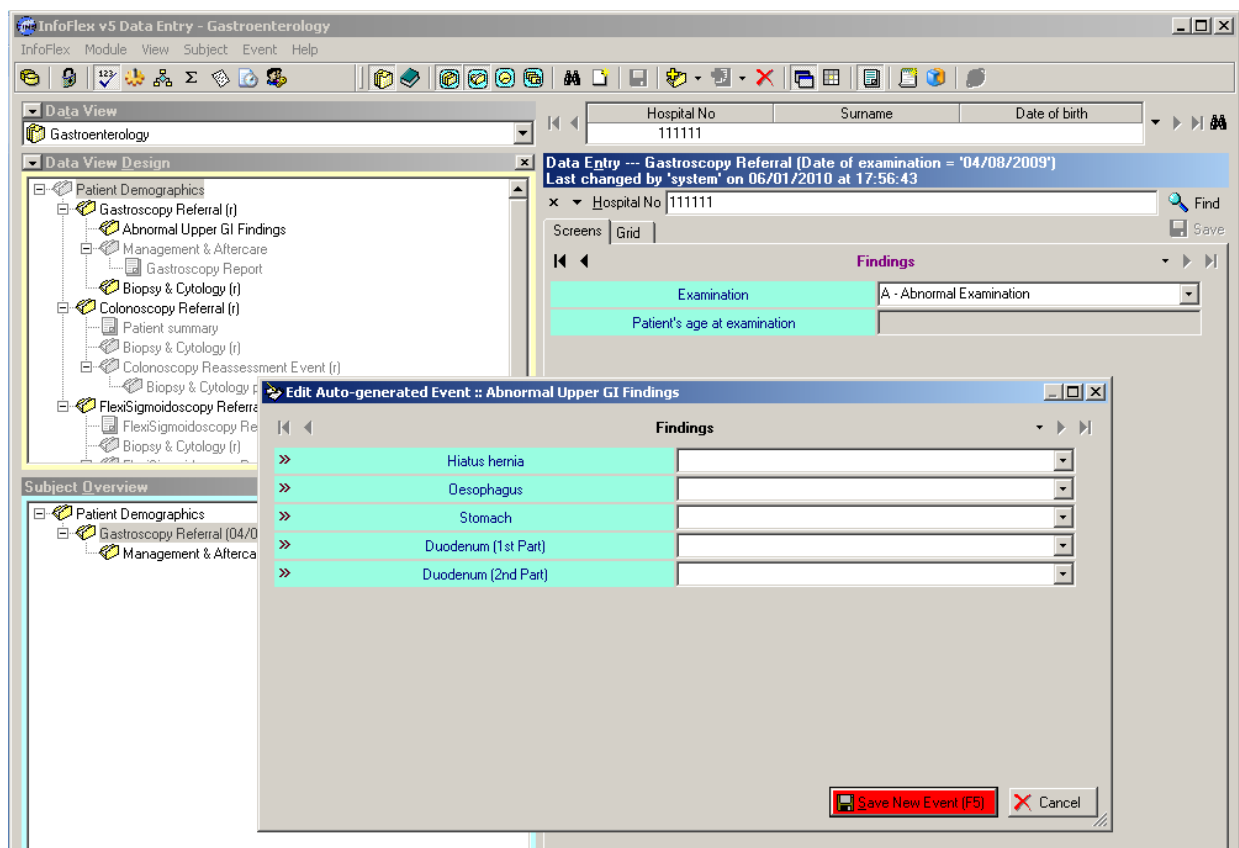
☐ Always select auto-generated event after creation

Editing events before auto-creating

The **Allow editing of auto-generated event before saving** option allows the user to enter data in the auto-generated event when it is first created ie before it is saved. Data can be entered and the user must then save the event themselves, or Cancel.

If the option has been ticked then the auto-generated event is displayed in a separate window as soon as the action has been triggered (i.e. on save of the event on which the action has been set up).

Normal data entry can be carried out in this window. The user can **Save** – in which case the auto-created event is saved with the values that the user has input; or the user can **Cancel** – in which case the auto-created event is not saved.



Only generating new event in the appropriate Data view

The **Only generate new event if associated event view exists in active data view** option prevents the new event being created if the data view that the user is editing does not contain the event view which would be auto-generated. When this option is selected, events will still be auto-generated in data views that do contain the event view which is being auto-generated.

Auto-create Events: Setting the focus back to the event being saved

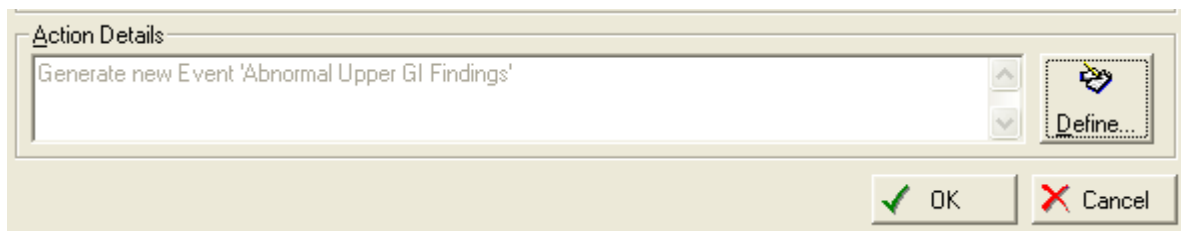
The **Always select auto-generated event after creation** option determines which event will be selected after the auto-created events are created.

- A tick means that the auto-generated event will be selected after auto-generation.
- No tick means that the event being saved (i.e. the event which triggers auto-generation) will be selected after auto-generation. In this case the focus stays in the panel which was being edited when the event was saved. To stay in the same actual panel item, the user must use the F5 key to save the event, rather than the Save button or save menu item.

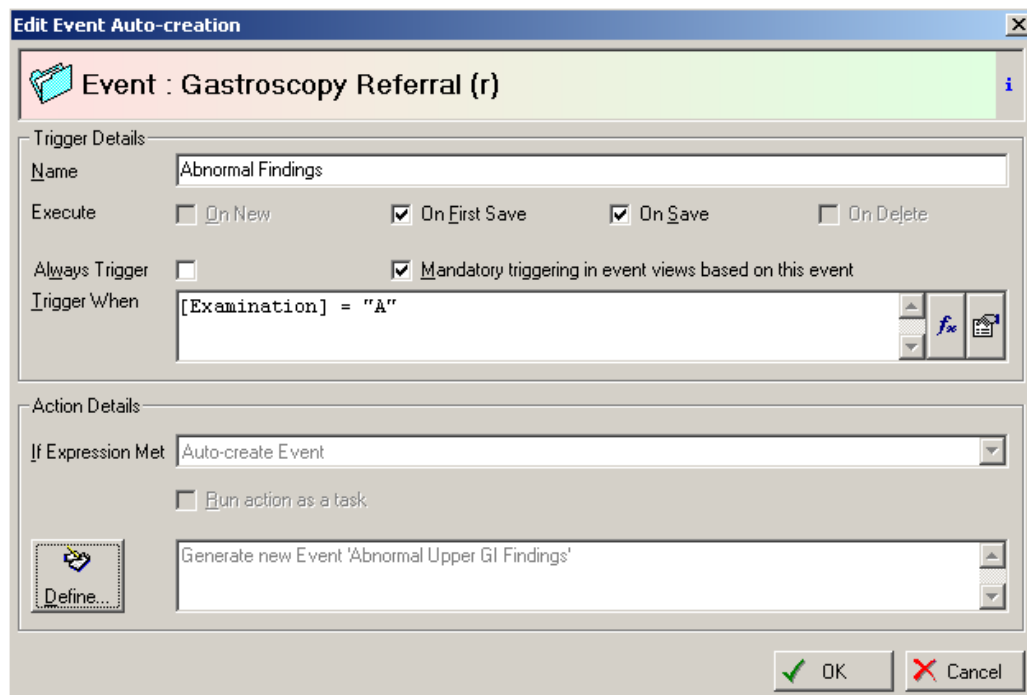
If there are several auto-generated events, the selected event will be the first auto-created event in the list that has a tick for this option. If none of them have a tick, then the selected event will be the event being saved.

When you have selected your Options, press OK to return to the **Define Event Auto-creation** window

The event to be auto-generated is displayed in the **Action Details** section of the window.



The definition of the event auto-creation is now complete. The **Abnormal Upper GI Findings** event will now be created whenever the Referral event is saved with a code of **A** in the **Examination** item.



Press **OK** to save the definition.

A summary of the auto-creation is displayed on the **Auto-create Events** tab.

After event saved ...				
Name	Expression	Execute	Action	Enabled
Abnormal findings	[Examination] = "A"	On First Save On Save	Generate new Event 'Abnormal Upper GI Findings'	<input checked="" type="checkbox"/>

Enabling and disabling auto-creations

Note that by default the auto-creation is set to **Enabled**. If you wish to disable the auto-creation so that it is not carried out in Data Entry, then remove the tick from the check box in the **Enabled** column.

Note that the **Enabled** property over-rides the mandatory settings described above. If an auto-creation is set to mandatory, or is not mandatory but switched on in a data view, then it will still be disabled if the **Enabled** check box is not ticked. See Appendix 2 below for more information.

Press **OK** to save and close the event definition.

Note: The **Edit Formula** window is used in several places in Design Management. For a full description of how the Edit Formula box works, see Appendix 2.

Exercise - Event Auto-creation using Always Trigger

Open the Event definition window for the **Gastroscopy Referral** event in the **Electronic Patient Record** domain.

Go to the **Auto-create events** tab.

The auto-creation you have just defined is already listed.

After event saved ...				
Name	Expression	Execute	Action	Enabled
Abnormal findings	[Examination] = "A"	On First Save On Save	Generate new Event 'Abnormal Upper GI Findings'	<input checked="" type="checkbox"/>

Press the **Add...** button to add another event auto-creation.



The **Define Event Auto-Creation** window is displayed.

Define Event Auto-Creation

Event : Gastroscopy Referral (r)

Trigger Details

Name

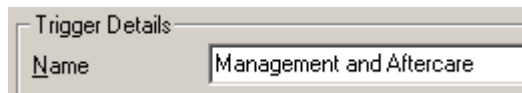
New Auto-Create Action

Always Trigger

☒

Name

In the **Name** box, enter the name **Management and aftercare**.

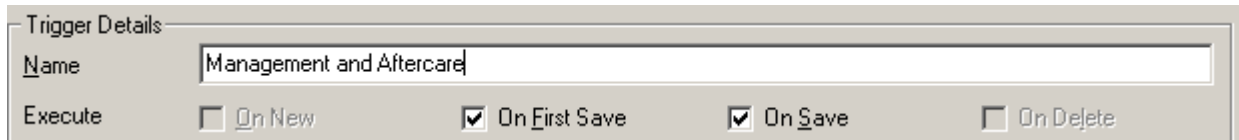


Trigger Details

Name Management and Aftercare

Execute

Set the auto-creation to happen **On First Save** and **On Save**.



Trigger Details

Name Management and Aftercare

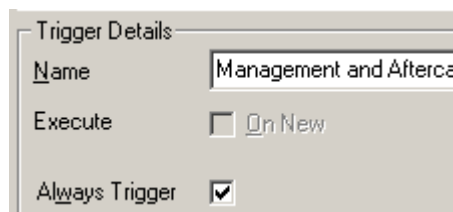
Execute ☐ On New ☒ On First Save ☒ On Save ☐ On Delete

Expression

The **Expression** is the criteria which when met will generate the event.

Leave the tick in the **Always Trigger** box.

This means that no specific criteria need to be met. When the event in which the auto-creation is defined is saved, the event set in the Action details box will be generated.

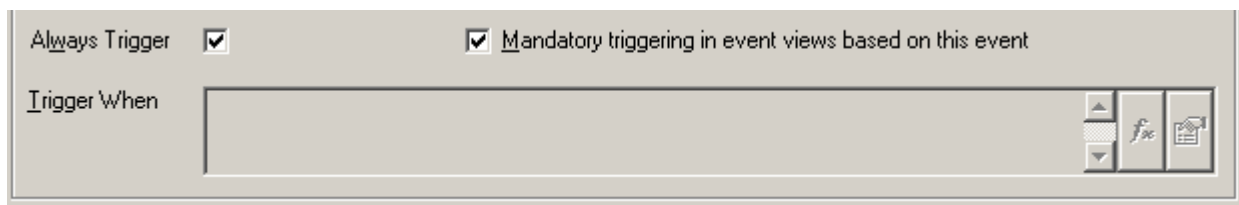


Trigger Details

Name Management and Aftercare

Execute ☐ On New ☒ Always Trigger

The Trigger When box is disabled since no criteria need to be defined.



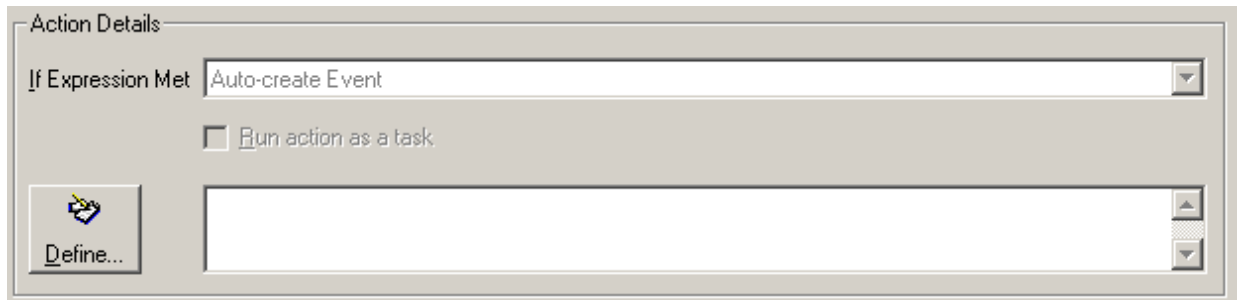
Always Trigger ☒ ☒ Mandatory triggering in event views based on this event

Trigger When

Action Details

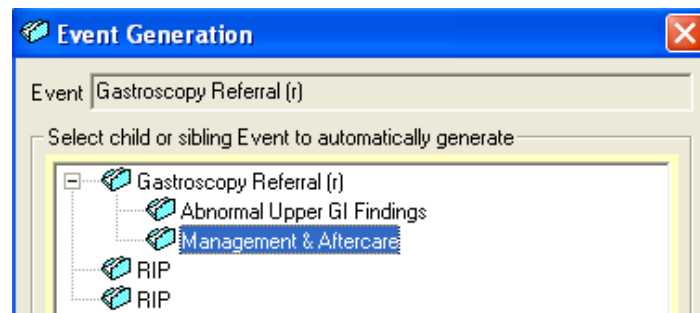
The event that is to be generated is defined in the **Action Details** box.

Press the **Define...** button in the **Action Details** section.

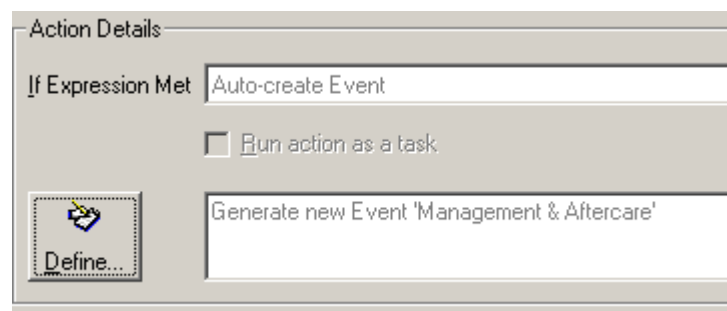


An **Event Generation** window is displayed which lists all the events in the domain it is possible to generate. Note that you are not limited to events within a particular data view.

Select the **Management & Aftercare** event then press OK to return to the **Define Event Auto-creation** window



The chosen event is displayed in the **Action Details** section of the window.



The definition of the event auto-creation is now complete. The Management & Aftercare event will now be generated whenever the Referral event is first created.

Define Event Auto-Creation

Event : Gastroscopy Referral (r)

Trigger Details

Name: Management and Aftercare

Execute: ☐ On New ☒ On First Save ☒ On Save ☐ On Delete

Always Trigger: ☒ ☒ Mandatory triggering in event views based on this event

Trigger When: [Empty field with function and event icons]

Action Details

If Expression Met: Auto-create Event

☐ Run action as a task

Define... [Generate new Event 'Management & Aftercare']

OK Cancel

Press **OK** to save the definition.

A summary of the auto-creations defined is displayed on the **Auto-create Events** tab.

Edit Event Definition

Event : Gastroscopy Referral (r)

General Advanced Identifiers **Auto-create Events** View Switching Actions History

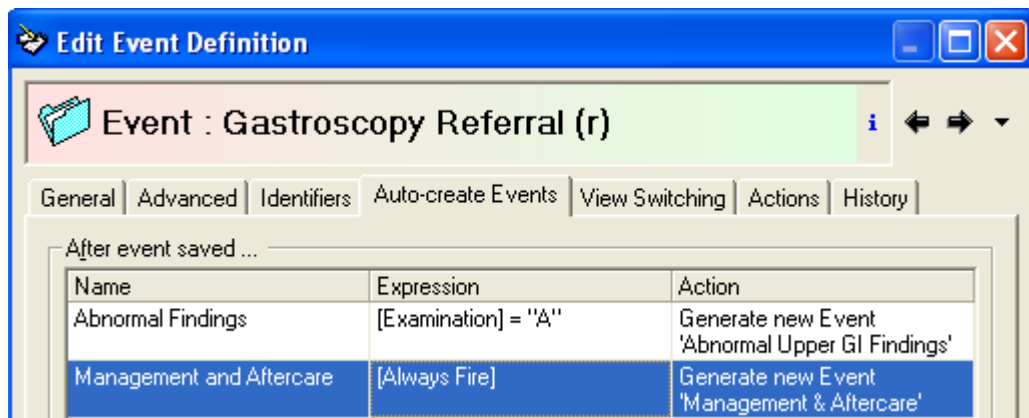
After event saved ...

Name	Expression	Execute	Action	Enabled
Abnormal findings	[Examination] = "A"	On First Save On Save	Generate new Event 'Abnormal Upper GI Findings'	<input checked="" type="checkbox"/>
Management and Aftercare	[Always Fire]	On First Save On Save	Generate new Event 'Management & Aftercare'	<input checked="" type="checkbox"/>

Press **OK** to save and close the event definition.

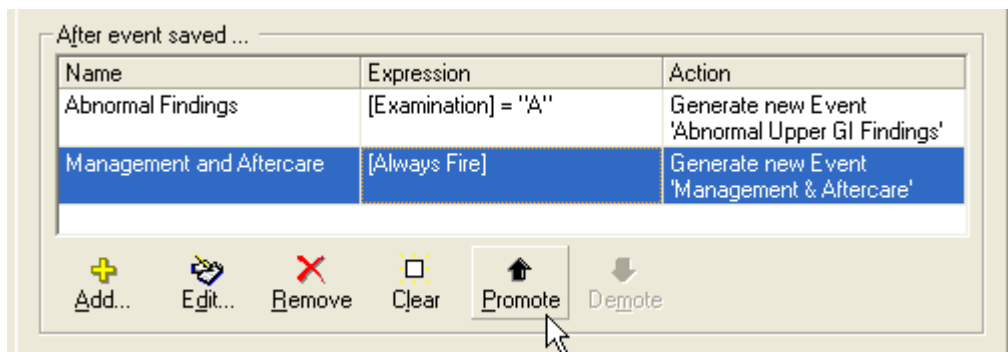
8.1.1 Triggering more than one event

Where more than one event is triggered, the order in which the auto-creations are displayed on the **Auto-create Events** tab is important.



In Data Entry, if on saving the trigger event, two or more events are auto-created, it is the first event on the **Auto-create events** tab that is opened for data entry. The other event(s) that are created are displayed on the tree, but they are not opened for data entry.

Use the **Promote** and **Demote** buttons to change the order of the auto-creations.



8.2 Data view switching

The **Data view switching** function allows you to define certain criteria, which when fulfilled will automatically cause Data Entry to switch to a different data view for the current patient.

Note that view switching can also be defined as an Action on the Actions tab of an event definition. Any switches defined on the **View Switching** tab are also displayed on the **Actions** tab.

Terminology

The event which causes the data view to be switched is known as the **Trigger event**.

The data view that is switched to is also known as the **Target data view**.

The definition of the data view switch is made in the Trigger event.

Rules

You can specify any criteria on which the event can be triggered, involving one or more items from the Trigger event or a parent of the Trigger event.

Only one data view can be switched to.

You can specify any data view in the domain to be switched to. If the Data Entry user does not have user permissions to the data view switched to, the switching will not happen.

Data view switching is defined in the domain, not in the data view.

The switching occurs when the event in which the switching has been defined is saved.

Elements of data view switching

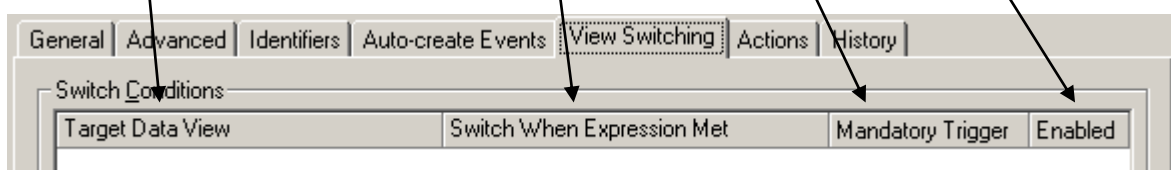
There are 4 elements to event auto-creation.

The **Target data view** is the data view which is switched to when the criteria are met.

The **Switch When Expression met** is the formula which forms the criteria that must be met.

Mandatory Trigger controls whether the View Switch is mandatory in all data views.

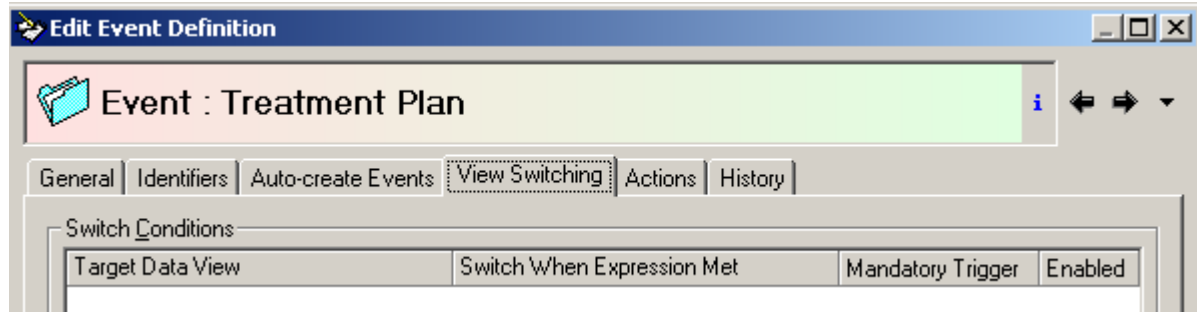
Enabled shows whether the auto-creation is enabled or disabled



Display the **Electronic Patient Record** domain.

Open the event definition for **Treatment Plan** event (the **Treatment Plan** event is a child of the **Referral and Initial Attendance** event).

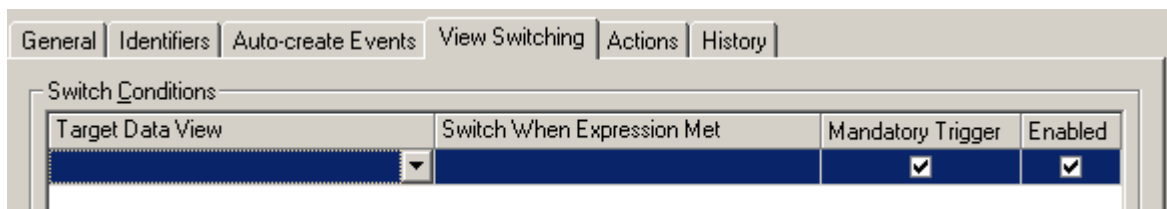
Go to the **View Switching** tab.



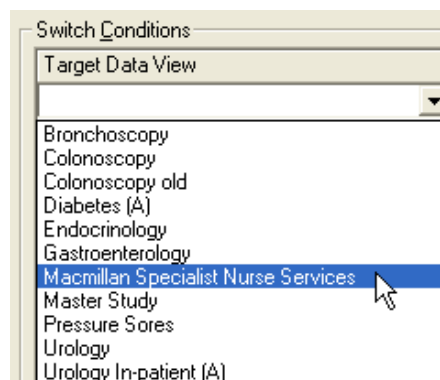
Press the **Add...** button.



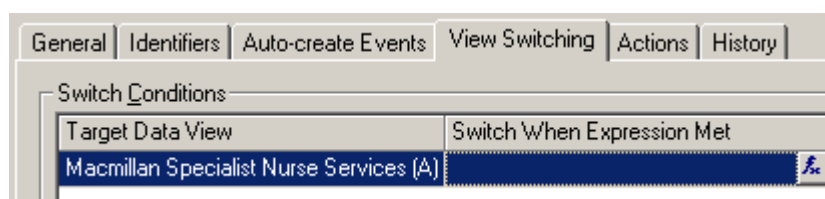
A new row is displayed in the **Switch Conditions** section of the tab.



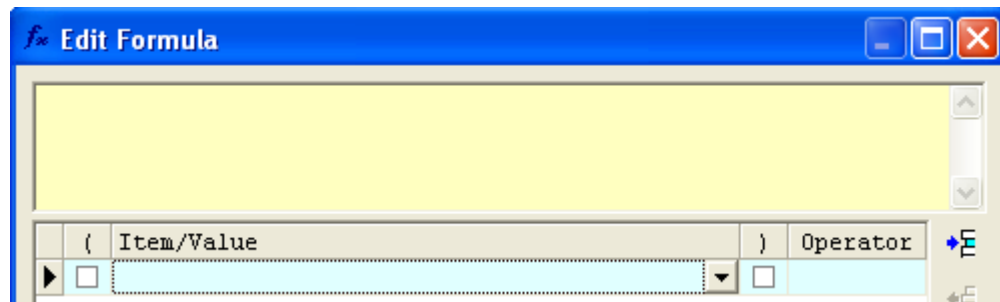
In the **Target Data View** box, select the **Macmillan Specialist Nurse Services** data view.



Click in the Switch When Expression Met box, then press the **fx** (edit formula) button.



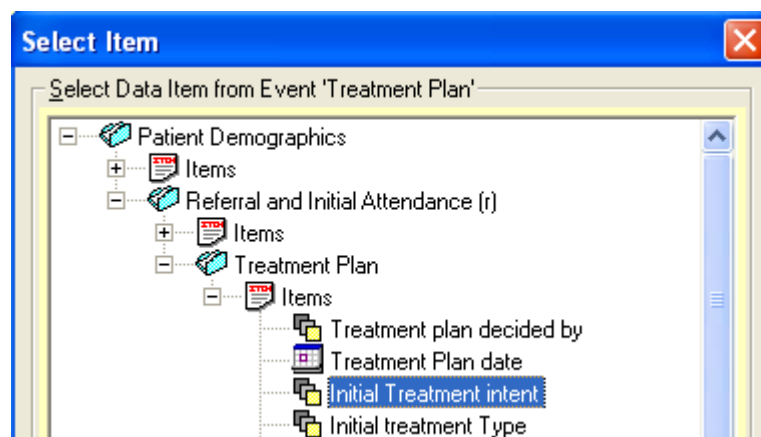
The **Edit formula** window is displayed



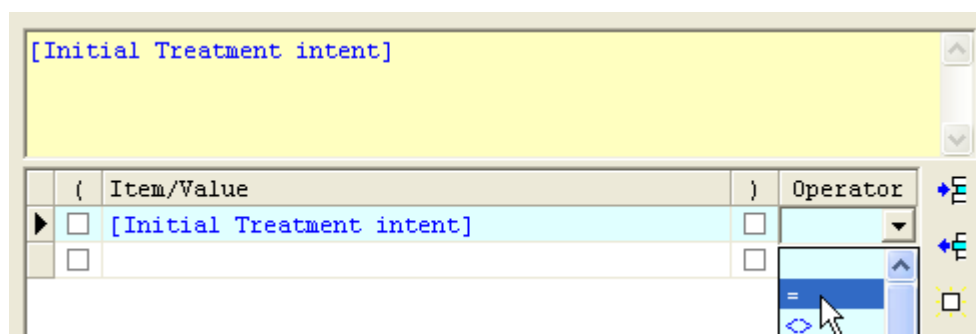
In the **Item/Value** column, choose **(Data Items...)**.



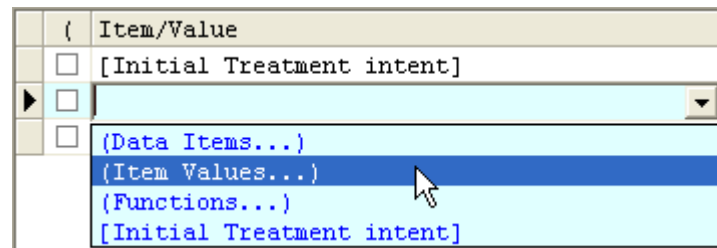
In the **Select Item** window, select the **Initial Treatment intent** item in the **Treatment Plan** event, then press **OK**.



In the **Operator** column, select **=**



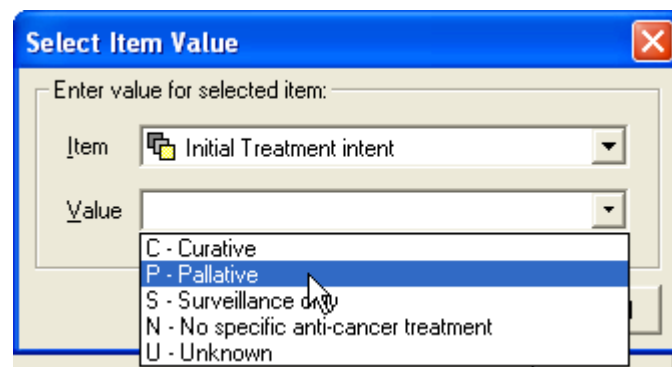
In the **Item/Value** column, on the next row select **(Item Values...)**.



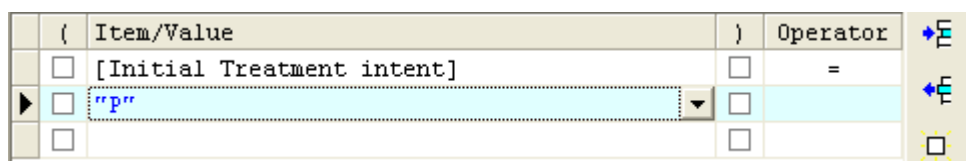
The **(Item Values...)** option displays a **Select Item Value** window which allows you to select one of the values which would be entered in an item in Data Entry.

The **Select Item Value** box displays the **Initial Treatment intent** item since that item has been included in the formula.

The **Value** box displays the codes available in the **Initial Treatment intent** item.



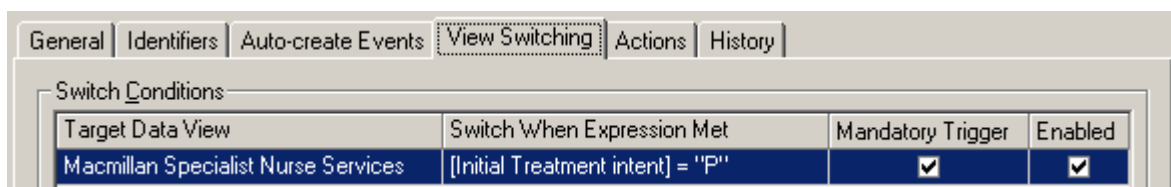
Select the **P – Palliative** code, then press **OK**.



The second row displays the code only, and the code is in double quotes, since any text used in a formula must be in double quotes if the formula is to work correctly.

Click **OK** on the **Edit Formula** window to return to the **View Switching** window.

The formula you have just defined is displayed in the **Switch When Expression Met** box.



Note that by default, both the **Mandatory Trigger** and **Enabled** check boxes are switched on.

The **Mandatory** option controls whether the view switch will be carried out in all event views containing the triggering event view. If this option is ticked, then the view switch will always be carried out where the triggering event view exists in a data view. If this option is un-ticked, then the auto-creation will not be carried out in a data view unless you choose to switch it on on the Actions tab of each data view which contains the triggering event view.

The Enabled option controls whether the view switch is carried out in Data Entry. If you wish to disable the view switch completely, then remove the tick from the check box in the **Enabled** column. The **Enabled** property over-rides the mandatory settings described above. If an auto-creation is set to mandatory, or is not mandatory but switched on in a data view, then it will still be disabled if the **Enabled** check box is not ticked. See Appendix 2 below for more information.

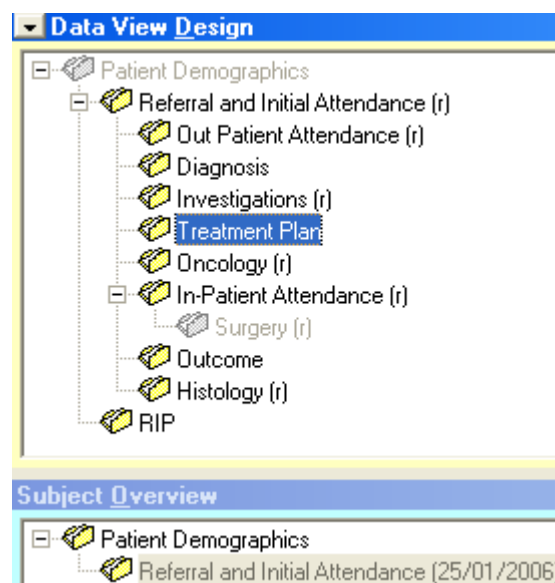
You have now set up a view switch. Press **OK** to save and close the event definition. In Data Entry, when any data view uses the **Treatment Plan** event, and a user enters **P – Palliative** in the **Initial Treatment Intent** item, then when the Treatment Plan is saved, the data view will switch to the **Macmillan Specialist Nurse Services** data view (as long as the user has permission to edit that data view).

To test this in Data Entry, unarchive the **Urology** data view, the **Macmillan Specialist Nurse Services** data view and the **Electronic Patient Record** domain.

Go to **Data Entry** and select the **Urology** data view.

Find the **TEST** patient.

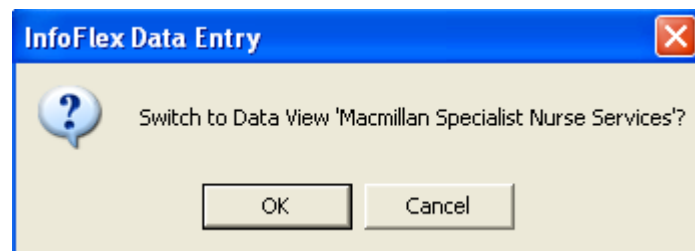
Add a **Treatment Plan** event to the patient.



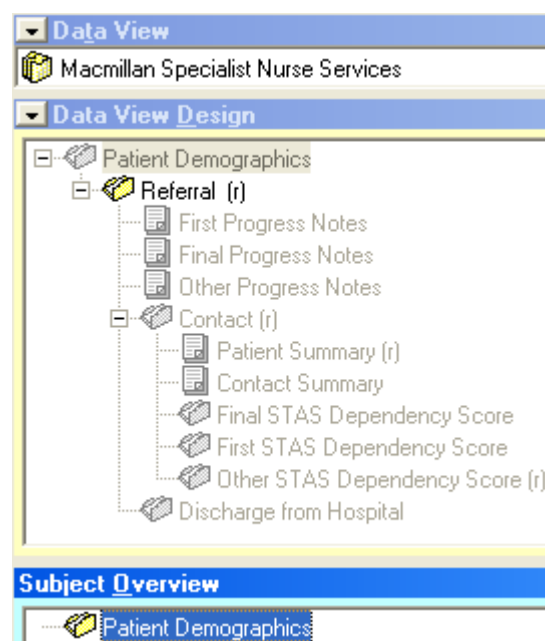
Enter **P – Palliative** in the **Initial Treatment intent** item then save the event.

>>	Treatment plan decided by	
	Treatment Plan date	
	Initial Treatment intent	P - Palliative

When you save the event, a message is displayed:



Click **OK** to the message and data entry switches to the **Macmillan Specialist Nurse Services** data view. If the patient exists in that data view, their subject overview is displayed.



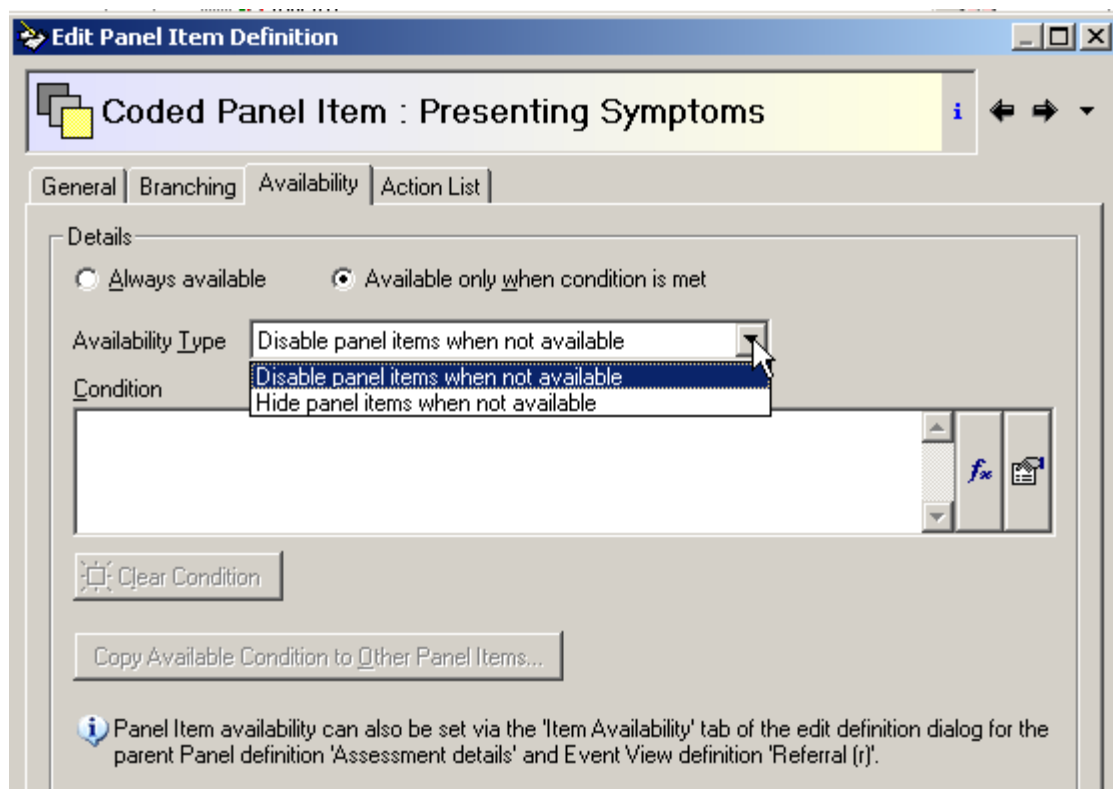
9 ADVANCED PANEL ITEM FUNCTIONALITY

9.1 Item availability

You can choose to make items available only when a condition is met. You can choose to disable or hide an item if the condition is not met.

If you wish to make an item available only when a condition is met, edit the panel item definition and go to the **Availability** tab.

Select the **Available only when condition is met** option and choose an **Availability Type** in the dropdown list.

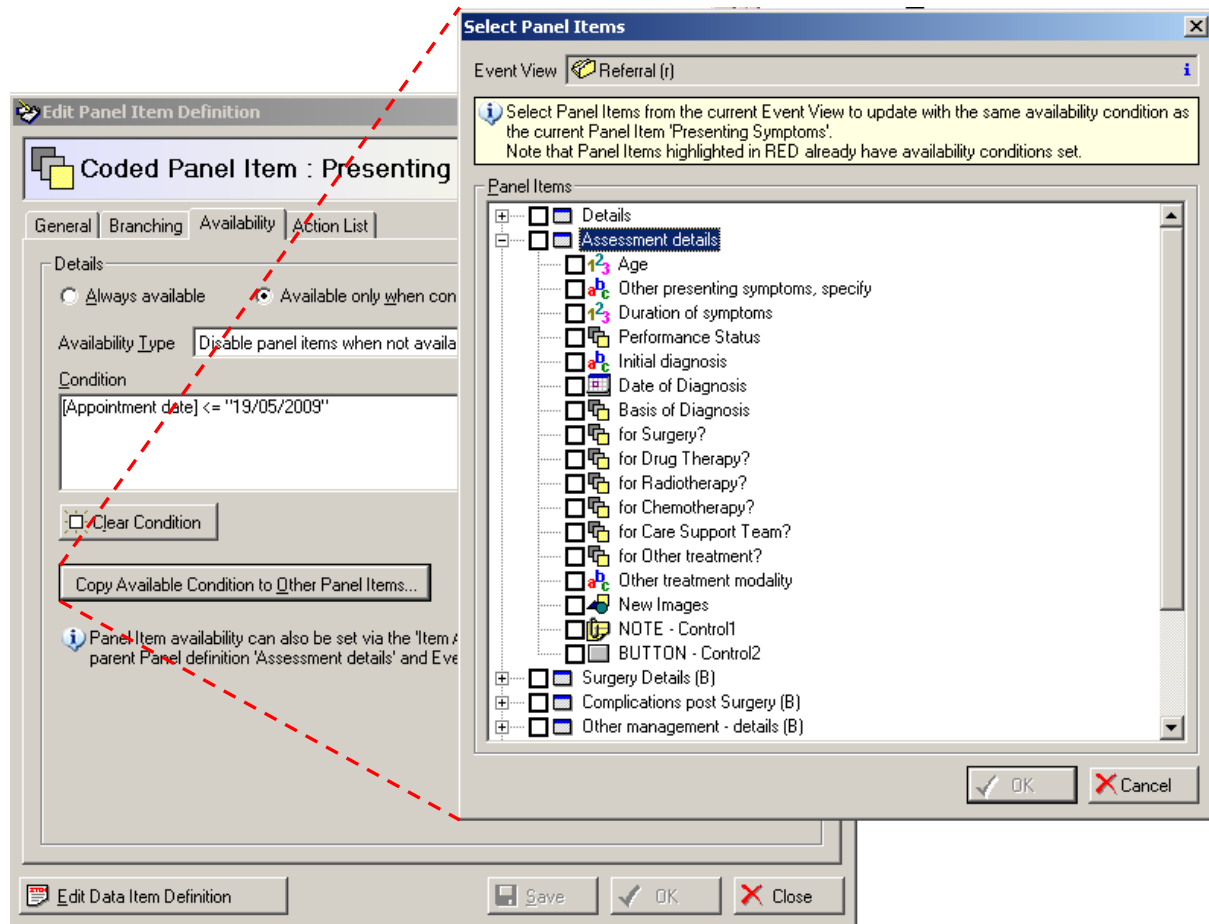


To define the condition which must be met in order for the item to be available, press the **fx** button in the **Condition** box and use the formula builder to define a condition.

9.1.1 Handling multiple availability conditions

If you have several items which all need to be made available on certain conditions, you can copy a condition you have already set on one panel item to other panel items.

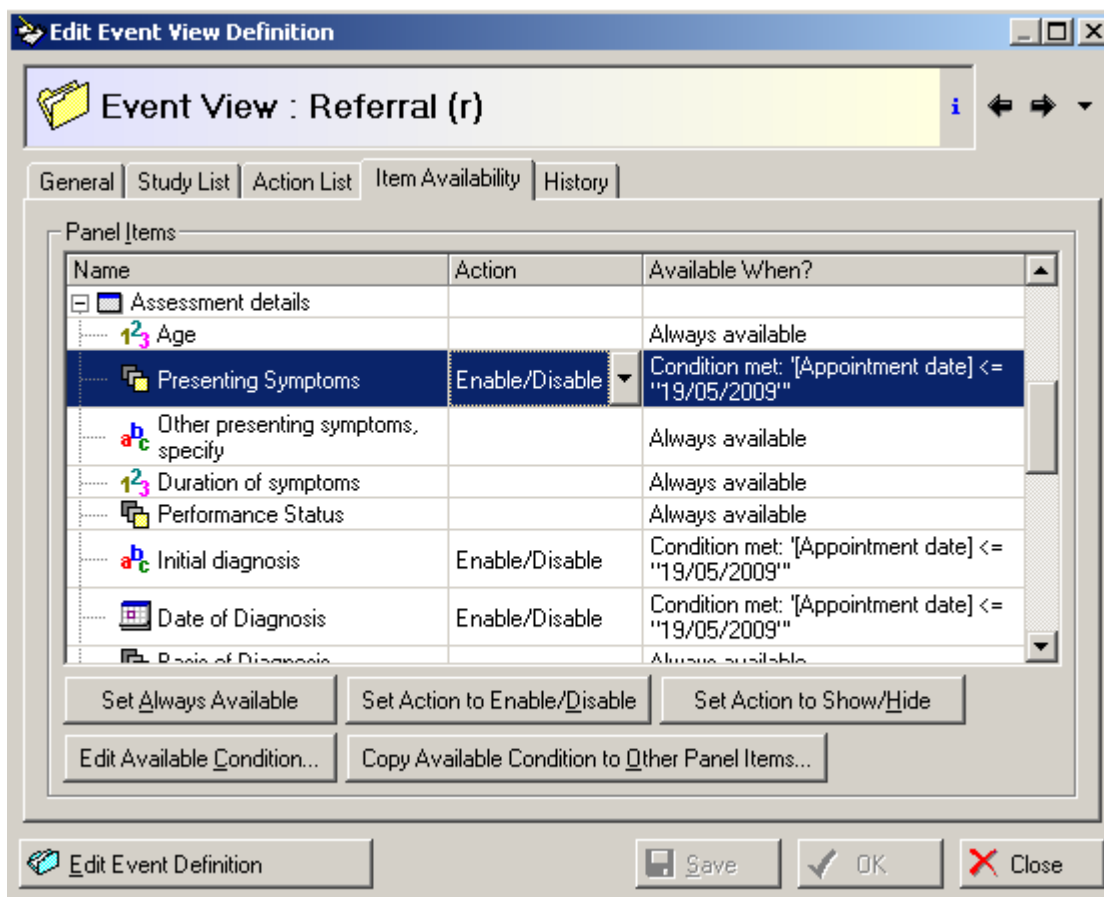
On the Availability tab for a panel item where you have already defined an availability condition, press the **Copy Available Condition to Other Panel Items** button. Select one or more items from the same event to copy the condition to.



You can also manage item availability using the **Item Availability** tab on a Panel definition or an Event View definition.

The tab lists all the items in the panel or event respectively and any conditions defined against them.

When you select an item that has an availability condition defined, a series of buttons are enabled allowing you to edit or copy the condition. You can also use the buttons to define new availability conditions for items that have no conditions defined.

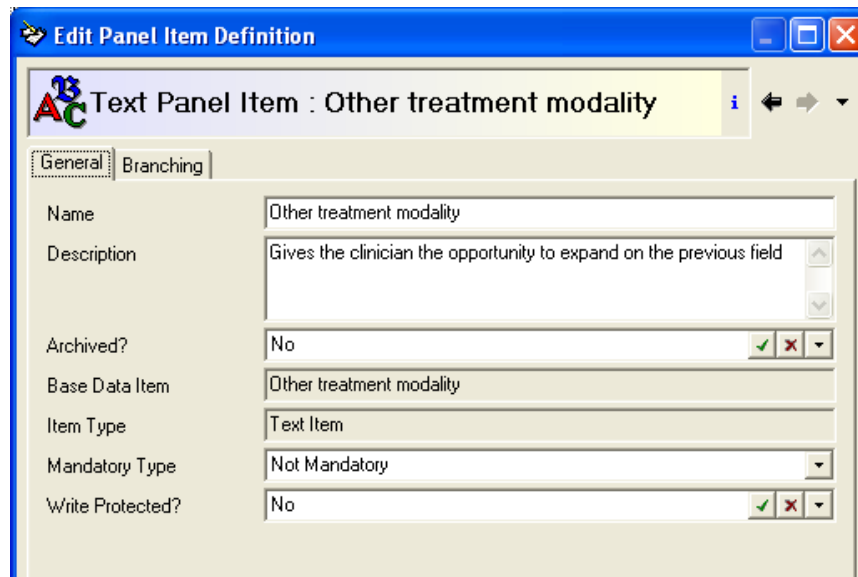


The buttons available are as follows:

Button	Action carried out
Set Always Available	Removes the condition from the item and makes it always available
Set Action to Enable/Disable	Changes the Availability type from Hide panel items when not available to Disable panel items when not available
Set Action to Show/Hide	Changes the Availability type from Disable panel items when not available to Hide panel items when not available
Edit Available Condition	Allows you to directly edit the availability condition. Can also be used to define a condition for items that previously had no condition defined.
Copy Available Condition to Other Panel Items.	Copies an existing condition to other panel items.

9.2 Write-Protection

Both the Data Item and the Panel Item have a write-protection property. If **Write-Protected?** is **Yes**, then the item will be read only and the user will not be able to edit the contents of this item.



By default data items are not write-protected. The exception is derived items and dictionary-linked items which both cannot be edited.

If the base data item is write-protected, the panel item will automatically be write-protected.

However a panel item can be write-protected but the data item not write-protected. This allows items to be read-only in one Data view while editable in another.

9.3 Mandatory Type Property

The **Mandatory Type** property can be set on a panel item as well as a data item. This will allow items to be mandatory in one Data view while not mandatory in another.

If the base data item is mandatory, then the panel item will be mandatory, regardless of what the **Mandatory Type** property is set to.

However the panel item can be set to **Mandatory** or **Mandatory (allow save)** when the data item is **Not Mandatory** or **Mandatory (allow save)**. On these occasions the panel item property overrides the data item property.

9.4 Boolean item Display Style property

The default display of Boolean items in Data Entry is as follows:



However, Boolean item can also be displayed as Check Boxes in Data Entry. For example:



The **Display Style** property in panel item definitions for Boolean items controls how the item is displayed. The property can be set to **0 - Default** or **1 - Check Box**.

Note that if the Boolean item is used in a panel layout, you may need to remove some of the area around the check box which is part of the item's label. To do this you can either:

1. Set the **Label Size Type** property for the boolean panel item to either **3 - Auto Size** or **2 - Fixed Size**. In the latter case you will need to specify a width for the panel item label in the **Label Size** property. The width of the panel item can then be adjusted to hide the dead space.
2. Set the **Label Transparent** property to **True** (either for the individual panel items or for the panel as a whole). The dead space in the boolean panel item will now be transparent as well.

APPENDIX 1 – DEFINITION TAGS

It is possible to assign tags to domain definitions and use these tags as a means of filtering the design trees. Tags are domain-specific.

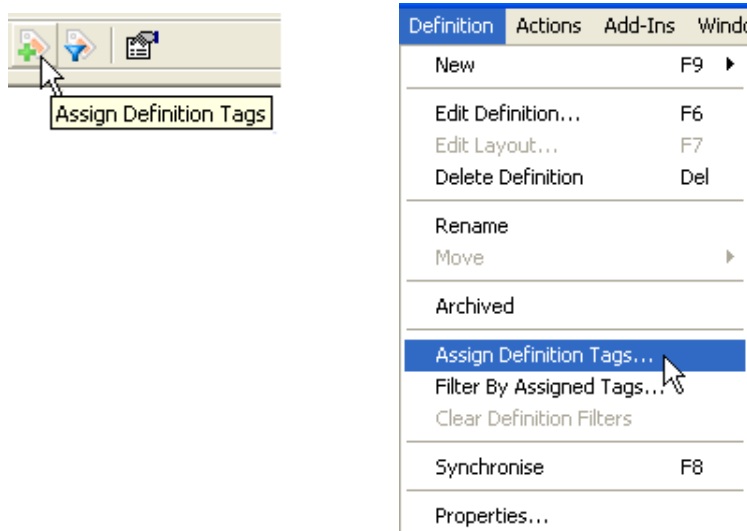
Tags can be assigned to events, items and documents in the domain. Definitions in the data view inherit their tags from the domain.

When a data view is filtered, panels are always displayed, whether or not they contain any tagged items, and event view summaries are always displayed.

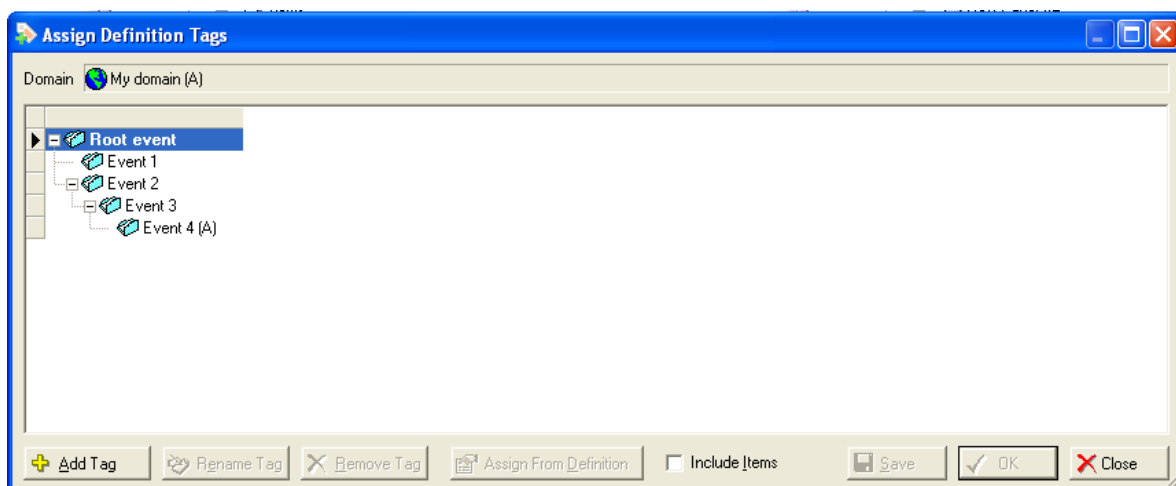
When a design is filtered, the domain and data view only display definitions whose tags meet the filter criteria. However, the filtering only applies to the displayed trees. If the user defines calculated items, or write back actions for example, all the items in the design are available to select from as usual.

How to assign tags

To assign tags to domain definitions, display the domain in which you wish to define tags then press the new **Assign Definition Tags** button on the toolbar, or go to the **Definition** menu and select the **Assign Definition Tags...** option.



The **Assign Definition Tags** dialog is displayed.

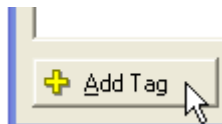


The dialog displays the current domain and all the events and documents defined in it. The dialog allows you to define tags and to assign them to events, items and documents in the domain.

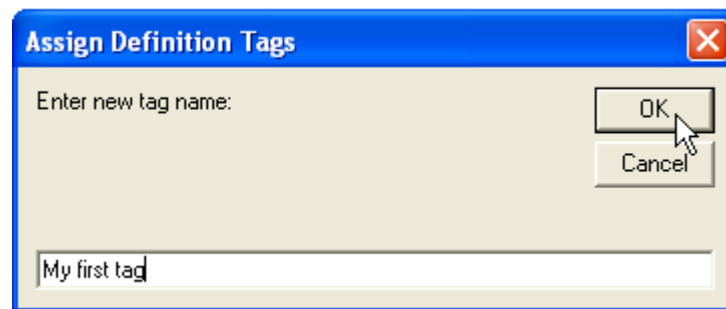
Item definitions are only displayed in the dialog when the **Include Items** check box is ticked. If you choose not to assign tags to items, then all the items in an event are displayed when a filter is applied. If you tick the **Include Items** check box you can assign tags to items and then only tagged items will be displayed when a filter is applied.

Defining tags

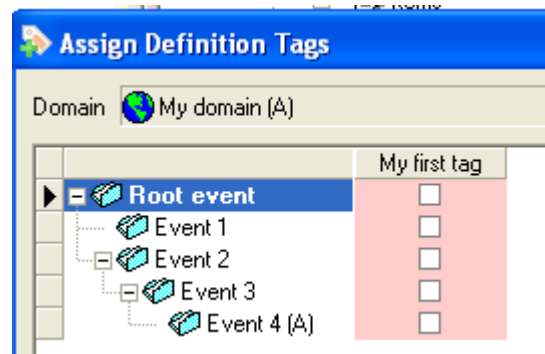
To define a tag, press the **Add Tag** button on the **Assign Definition Tags** dialog.



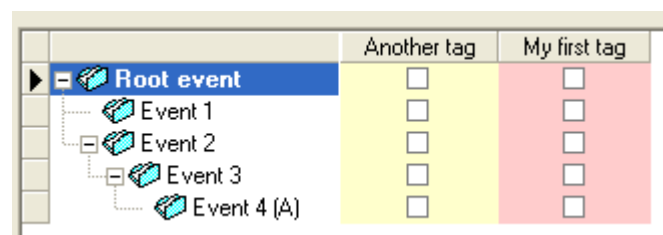
Enter a name for the tag then press OK.



A column is added for the tag, with a coloured background.

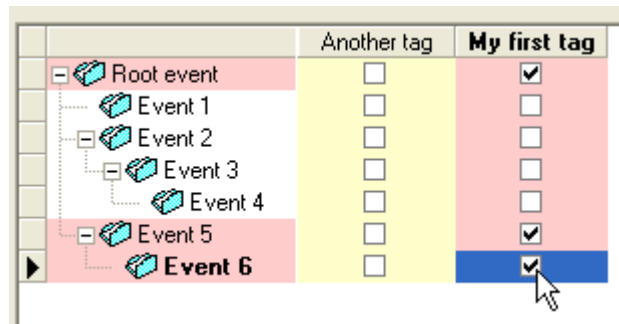


If further tags are added, the columns are added in alphabetical order.



Assigning Tags

To assign a definition to a tag, simply click in the corresponding check box.



When you assign a tag to a definition, the ancestor events of the definition are also assigned to the same tag. This is so that tagged definitions will always be seen as expected when the design tree is filtered. A child definition cannot be displayed unless its parent definition is displayed too. In the above example, if the parent events of Event 6 were not tagged, it would not be possible to display event 6 in the design tree when the design is filtered by “My first tag”.

Similarly, unassigning a tag from a definition also unassigns that tag from any descendant definitions. In this example, if you untick Event 5, then Event 6 is also unticked since it cannot be displayed if Event 5 is not displayed.

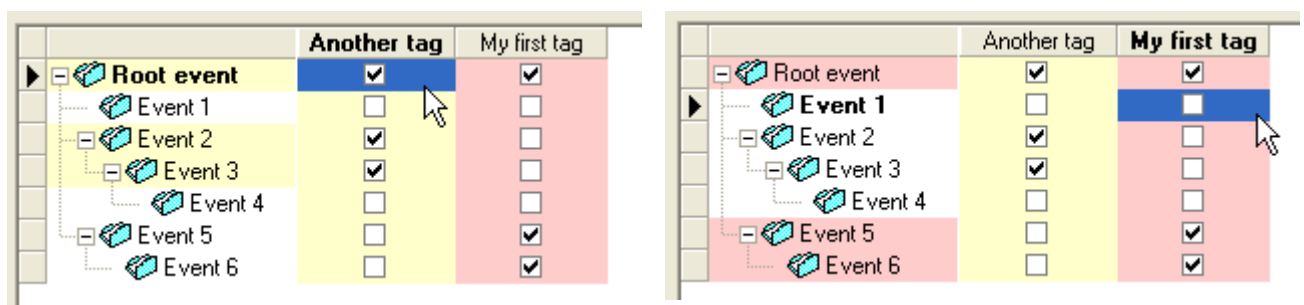


Therefore, to clear all assigned tags, simply deselect the tag from the root event, and the tags will be removed from all the definitions in the design.

Colours

Each tag column has a different background colour.

Whenever you select a tagged column, all definitions assigned to that tag are shown with the same background colour.



Include Items

By default, the **Include Items** box is unticked, which means that only events and documents are available to have tags assigned. When a filter is subsequently applied, all the items in a tagged event will be shown in the design trees.

If you choose to **Include Items**, then you can assign tags to individual items. When a filter is applied, item definitions will be shown or hidden in the design trees according to the currently selected tags. (If no items are tagged in a tagged event, then no items are displayed in that event when a filter is applied.)

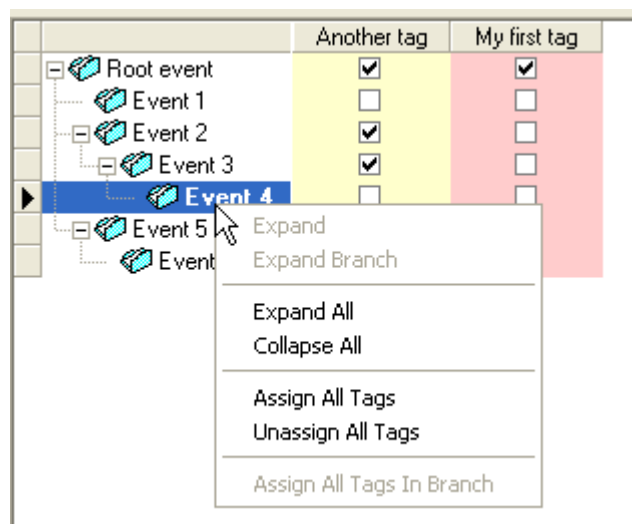
When you tick the **Items** node, all the items in that event are ticked. When you untick the **Items** node, all the items in that event are unticked, but the event itself remains ticked. When only some items in an event are tagged, the Items node tick shows in grey.

If tags are assigned to items and you switch off **Include Items**, all tagged items will be untagged and all items in a tagged event will be displayed.

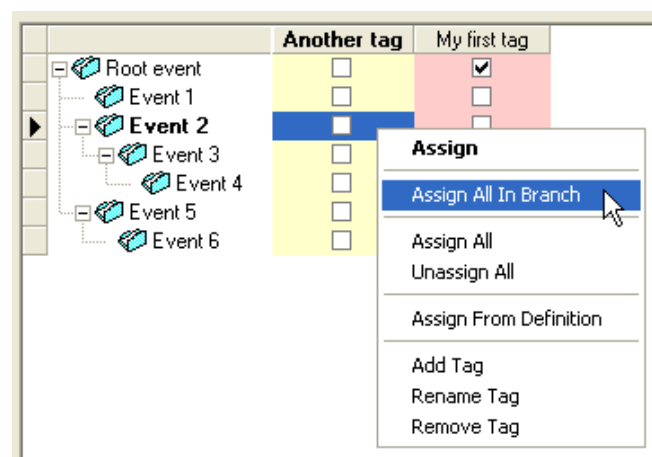
Right click menus

Right click menus are available when you right click the design column and when you right click a tag column.

When right clicking in the design column, the **Assign All Tags** option assigns all the defined tags to the selected definition (and its ancestor events). Similarly, the **Unassign All Tags** option removes all the defined tags from the selected definition (and its child events).

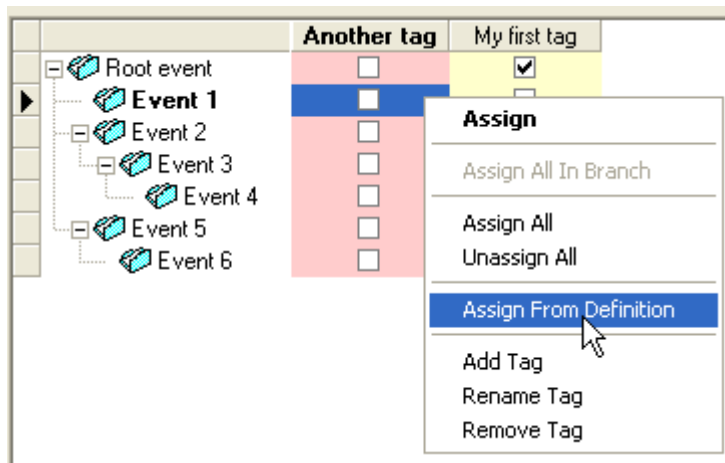


When right clicking in a tag column, the **Assign** options assign only the selected tag. So **Assign All In Branch** assigns the selected tag to all the definitions in the selected branch.

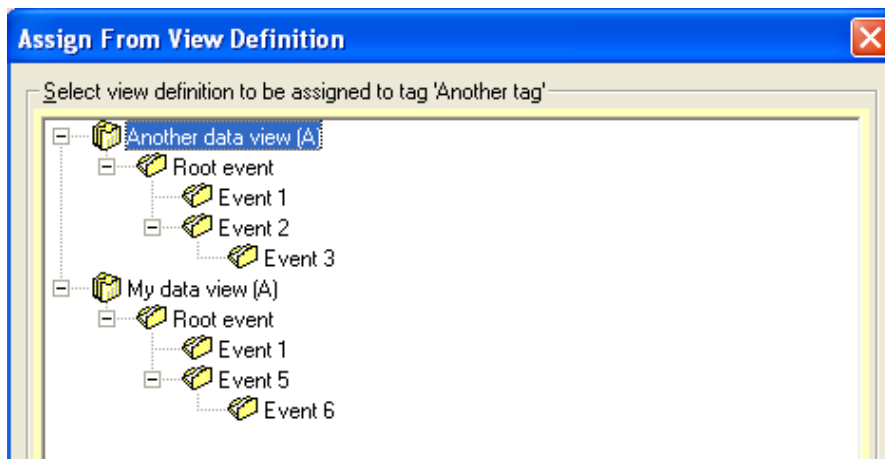


Note that there is no menu command to unassign all definitions in a tree branch as this is done by default when a parent event is unassigned.

The **Assign From Definition** option displays a dialog showing all the data views that exist in the domain and allows you to select definitions to tag from the data view.



Select a definition from any data view and press **OK**. The tags are still assigned to the domain definition but in large designs it can be easier to find events in the data view.



Adding, Renaming and Removing tags

The **Add Tag**, **Rename Tag** and **Remove Tag** buttons are used to add, rename and remove tags respectively. These options are also available when you right click a tag column.

When you remove a tag, the whole tag column is deleted and definitions are no longer assigned that tag.

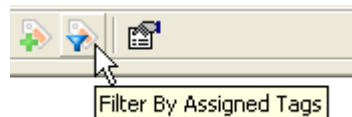
How to apply a filter

Users can select one or more tags to filter by. The filter is applied to the domain and any data views belonging to that domain.

Once tags have been defined in a domain and it is therefore possible to apply a filter, the corner of the domain window and data view windows show a tag symbol with a filter:



To apply a filter, click the tag symbol or press the **Filter By Assigned Tags** button on the toolbar.



When you press the tag symbol, the filter pop up menu is displayed.

The upper section allows you to select one or more tags to filter by, or to display Untagged definitions.

The middle section controls how the filter is applied when multiple tags are selected (see below).

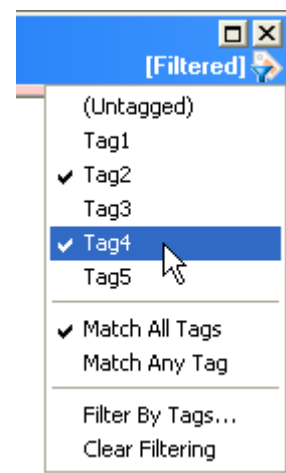
The lower section allows you to display the **Filter By Tags** dialog or to clear the filters.



Simply click the options you require. Note that the pop up menu closes when a selection is made, so to make multiple selections you will need to display the menu multiple times or else use the **Filter By Tags** dialog – see below.

Once you have selected tags to filter by, the tag symbol becomes coloured and **[Filtered]** is displayed next to the tag symbol. The domain and data views displayed only show those definitions that match the selected tags.

If a user chooses to filter by a tag which no definitions are assigned to, then rather than displaying no definitions, the root event alone is displayed.



Match Any Tag

When **Match Any** is selected, definitions that are assigned to at least one of the selected options are displayed. When **Match Any** is selected, it is possible to select tags and the **Untagged** option at the same time, so that definitions that are untagged can be displayed at the same time as those that are tagged.

Match All Tags

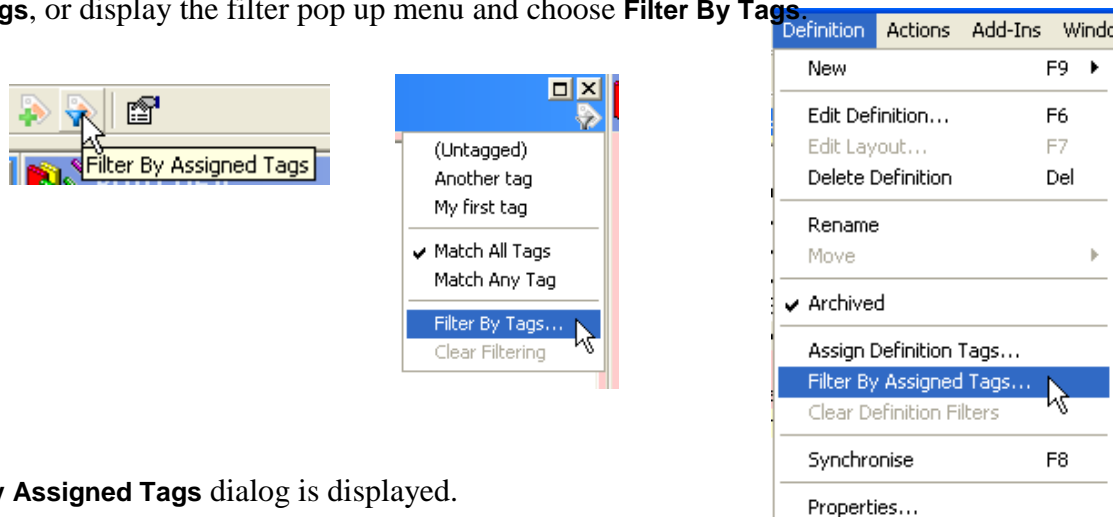
When **Match All** is selected, only definitions that are assigned to all the selected tags are displayed. In this case it is not possible to select tags and the **Untagged** option at the same time since selecting tags since definitions cannot be both tagged and untagged. No definitions would be shown in the tree.

Selecting the **(Untagged)** option will therefore deselect any currently selected tags, and selecting tags will deselect the **(Untagged)** option.

Match All Tags is the default setting.

Filter by Assigned Tags dialog

The **Filter By Assigned Tags** dialog is an alternative method of selecting tags to filter by. To display the dialog press the toolbar button, go to the **Definition** menu and choose **Filter By Assigned Tags**, or display the filter pop up menu and choose **Filter By Tags**.



The **Filter By Assigned Tags** dialog is displayed.



Select tags and/or the **(Untagged)** option as appropriate.

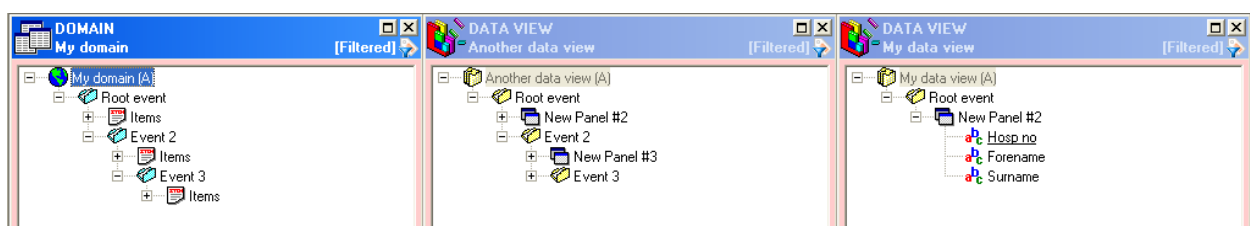
The **Only show definitions which match all of the selected tags** option corresponds to the **Match All Tags** option (see above).

The **Show definitions which match any of the selected tags** option corresponds to the **Match Any Tags** option (see above).

Once you have made your selections, press **OK** to apply the filter.

Knowing whether a filter is applied

When a filter is applied, the tag icon becomes coloured and **[Filtered]** is shown next to the icon. The domain and any data views belonging to that domain are displayed are all filtered by the selected tags.



Once a filter is applied, you can hover the mouse over the tag symbol of the **[Filtered]** text and the tooltip indicates the filter that is applied. Where there are multiple tags chosen, “or” indicates that **Match Any** is set, and “and” indicates that **Match All** is set.



Changing filter selections

To change the filter that is applied, display the filter pop up menu or the **Filter By Assigned Tags** dialog and select a different tag or setting.

If you change to **Match All Tags** when both tags and the **(Untagged)** option are selected, the **(Untagged)** option will be deselected because otherwise no definitions would be displayed. (No definitions can have tags applied and also be Untagged).

If the **Match All** option is selected and the user selects the **(Untagged)** option in addition to other tags, the other tags will be deselected since otherwise no definitions would be displayed.

Creating new definitions when a filter is applied.

If a new report is created while a filter is applied, it is assigned to the currently filtered tags.

When new events, documents or items are created, they will be assigned to the tags of their parent event that are included in the current filter criteria.

This is to maintain design integrity. When a user first assigns tags to definitions, the ancestors of that definition are assigned to the same tag. Therefore when a user creates child definitions in a filtered design, the definitions inherit the tags of the parent definition, but only those that are currently being filtered by.

A new definition is not assigned to all the tags in the filter criteria because the parent event might not belong to all those tags.

Similarly the parent might belong to more tags than those being filtered by but since the new definition is being created in a filtered design, the new definition is only assigned to the tags included in the filter criteria.

If definitions are created when no filters applied, no tags will be assigned to those definitions.

Example 1:

📁 Patient demographics (belongs to Tag A and Tag B)

 📁 Event 1 (belongs to Tag A and Tag B)

 📁 Event 2 (belongs to Tag A and Tag B)

 📄 New item

If this design is filtered by “Tag A”, the new item will be assigned to Tag A only since Tag A is the only tag of the parent event that is currently being filtered by. Even though the parent event belongs to Tag B, the design is not being filtered by Tag B, therefore the new item is not assigned to Tag B.

Example 2:

📁 Patient demographics (belongs to Tag A and Tag B and Tag C)

 📁 Event 1 (belongs to Tag A and B)

 📁 Event 2 (belongs to Tag A and B)

 📄 New item

If this design is filtered by “Tag A or Tag C”, the new item will still only be assigned to Tag A. Even though Tag C is being filtered by, the parent event of the item does not belong to tag C, and new definitions can only be tagged with the tags of their parent event.

Example 3:

📁 Patient demographics (belongs to Tag A and Tag B and Tag C)

📁 Event 1 (belongs to Tag A and B)

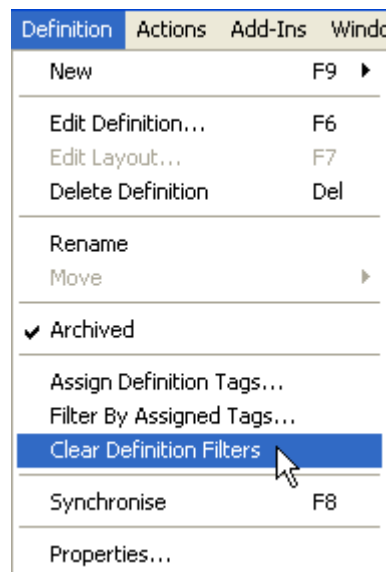
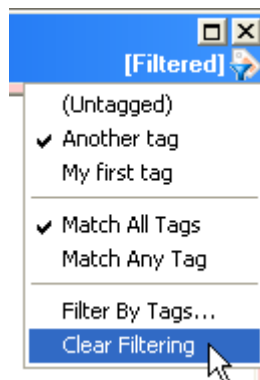
📁 Event 2 (belongs to Tag A and B)

📄 New item

If this design is filtered by “Tag A and Tag B”, the new item will be assigned to Tag A and Tag B. This is because these tags are both in the filter criteria and are also assigned to the parent event of the new definition.

Clearing filters

To clear the applied filter and show all definitions, display the filter pop up menu and choose **Clear Filtering**, or go to the **Definition** menu and choose **Clear Definition Filters**.



APPENDIX 2 – VIEWING OPTIONS

On the **View** menu, select **Options...**

The options available on each tab are described below.

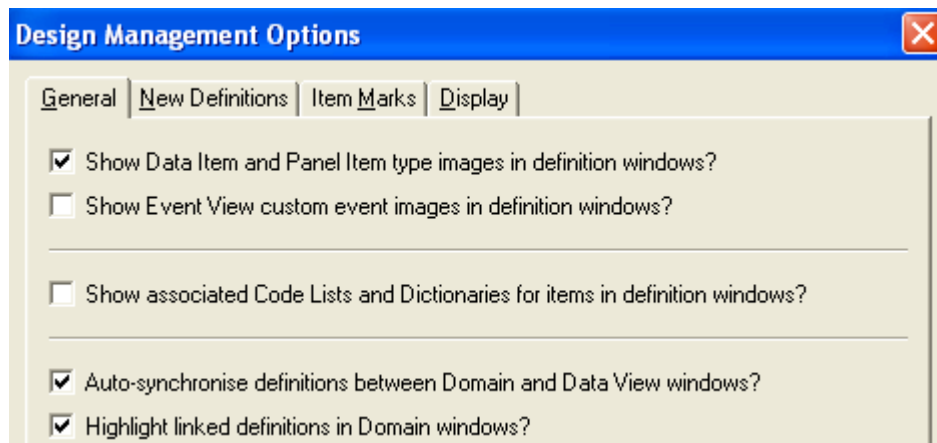
In each case you can apply the settings whilst the **Options** window is open, to see the effect your changes have made to the Design Management screen. You can also restore the default settings at any time by pressing the **Reset to Defaults** button.

General tab

This tab allows you to modify the display of events and items.

Option	Meaning
Show Data Item and Panel Item type images in definition windows?	Display image indicating the item type in the design trees. (The same option also on View menu Show Item images).
Show Event View custom event images in definition windows?	If you have changed the icon for an Event view, then this allows the chosen icon to be seen in Design Management definition windows.
Show associated Code Lists and Dictionaries for items in definition windows?	In the design tree, shows the code list names used in code list items and the dictionary names used in dictionary items (see Design Management 1, section 3.11 for full details)
Auto-synchronise definitions between Domain and Data View windows?	Highlight (in grey) the selected item or event where it occurs in any open domains or data views. (The same option also on View menu Auto-synchronise . See Section 2.4, Design Management Tutorial 1)
Highlight linked definitions in Domain windows?	Display in red in the domain any events and items which exist in the currently selected data view. (The same option also on the View menu Highlight Linked Definitions . See Section 2.4, Design Management Tutorial 1).

Default settings for this tab are as follows:

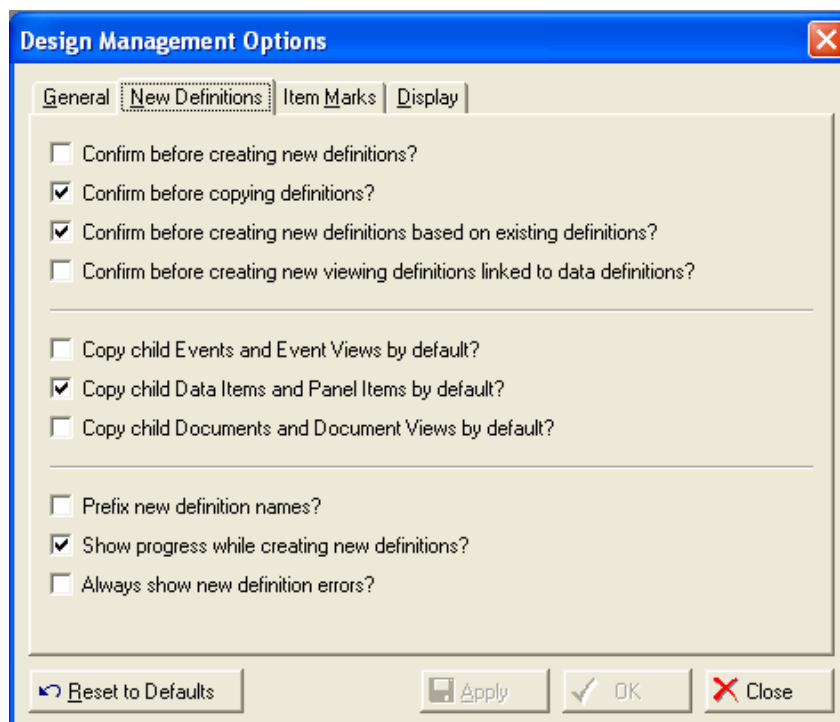


New Definitions tab

This tab controls the display of confirmation boxes and default settings when creating and copying definitions.

Option	Meaning
Confirm before creating new definitions?	Display the Create New Definition window after choosing New ... and before saving a new definition.
Confirm before copying definitions?	Display the Create New Definition window after dragging and dropping and before creating new definitions when <u>copying within a domain or from one domain to another</u> .
Confirm before creating new definitions based on existing definitions?	Display the Create New Definition window after dragging and dropping and before creating new definitions when <u>copying from one data view to another within a domain</u> .
Confirm before creating new viewing definitions linked to data definitions?	Display the Create New Definition window after dragging and dropping and before creating new definitions when <u>copying from a domain into a data view</u> .
Copy child Events and Event Views by default?	When dragging and dropping events, automatically copy events and event views (or set the flag to yes on the Create New Definition window).
Copy child Data items and Panel items by default?	When dragging and dropping events, automatically copy items or panel items (or set the flag to yes on the Create New Definition window).
Copy child Documents and Document Views by default?	When dragging and dropping events, automatically copy documents or document views (or set the flag to yes on the Create New Definition window).
Prefix new definition names?	When creating new events and event views, prefix the name with based on, linked to etc
Show progress while creating new definitions?	Display a progress box while events and items are copying
Always show new definition errors?	

Default settings for this tab are as follows:



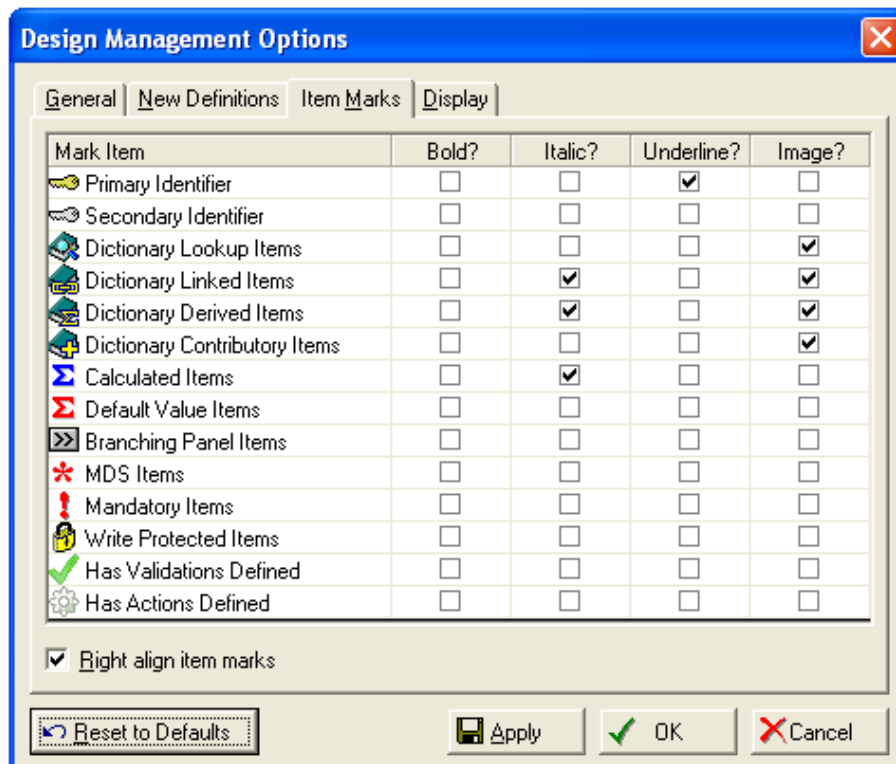
Item Marks tab

This tab allows you to modify the appearance of certain types of item. The modifications to their appearance will occur in design management only.

For each type of item in the **Mark Item** column:

- ♦ place a tick in the **Bold?** column if you wish the item to be displayed in bold
- ♦ place a tick in the **Italic?** column if you wish the item to be displayed in italics
- ♦ place a tick in the **Underline?** column if you wish the item to be displayed with underline.
- ♦ place a tick in the **Image?** column if you wish the image in the item mark column to be displayed next to the item name.

Default settings for this tab are as follows:



Only one item image can be displayed against an item, so if an item meets several of the above descriptions, only one image will be displayed.

For example, if a dictionary lookup item has a validation defined then the dictionary lookup image will be displayed in preference to the validations image (if item marks options are so configured).

Panel items with actions defined against the base data item definition will only be marked accordingly in the design trees if any of the defined actions are mandatory or are optionally selected for the panel item definition.

Domain, Data view, Event, Document, Event view and Document view definitions will also be marked with the actions image if they have actions defined. This will always happen and is not controlled by the settings in the options dialog. For event views and document views, the protection image takes precedence over the actions images. So if an event view is protected and has actions defined then the protection image will be shown. Also, as for Panel items, Event views and Document views will only be marked as having actions if there are any mandatory actions defined on the base event or document, or if there are actions optionally selected for the event view or document view definition.

Display tab

This tab allows you to modify the display in the Design Management module.

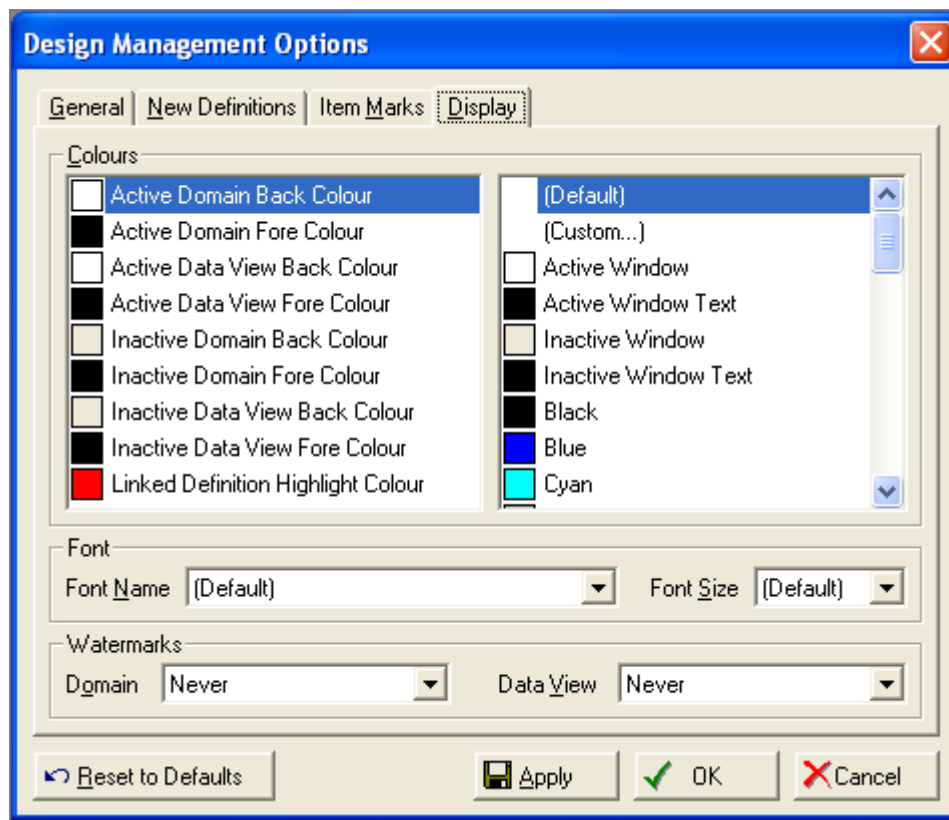
Colours

The Colours section allows you to modify the colours of different parts of the Design Management screen.

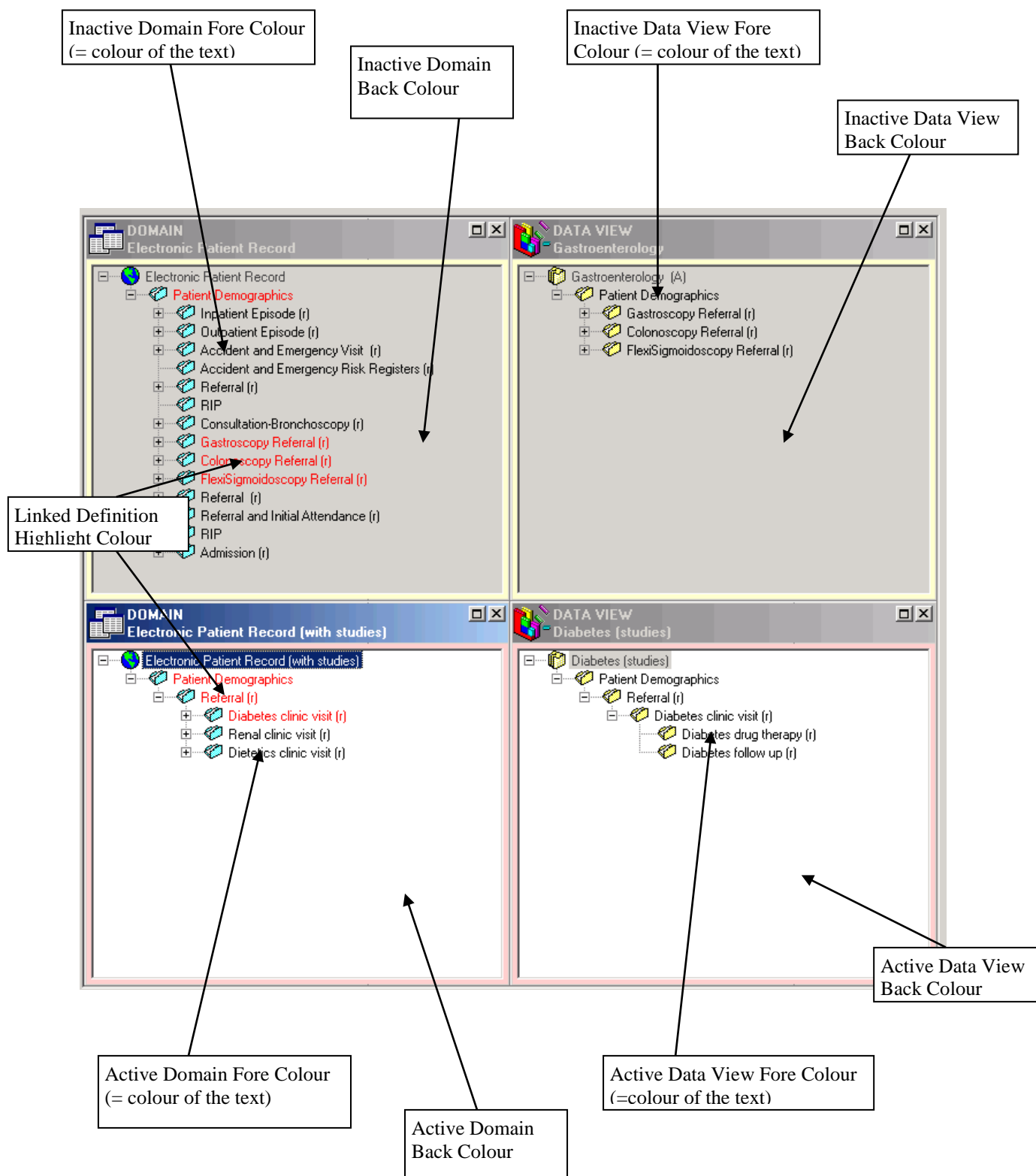
The list to the left lists the parts of the Design Management screen and the colours currently assigned to them. To modify the colour of one part of the screen, select an entry in the list on the left, and then choose a colour from the colour panel in the right-hand section of the tab.

For example, to modify the Linked Definition Highlight Colour, select **Linked Highlight Definition Colour** in the list on the left, then select a new colour (eg Cyan).

Default colour settings are as follows:



The diagram on the next page illustrates the names given to the parts of the design management screen.

Parts of the Design Management screen

Font

The Font Name and Font Size control all the fonts in use on the Design Management window. If you select a new font name and font size, these will be applied to all the definition names in the navigation bar and open domains and data views. The font name and size do not control fonts in use on the menus.

Water marks

The Watermarks section of the tab allows you to choose circumstances in which to display a watermark behind open domains and data views.

The circumstances available are

- ♦ never
- ♦ only when active
- ♦ only when inactive
- ♦ when active or inactive.

APPENDIX 3 – ACTIONS

Actions can be defined on a range of **definitions** including Domains, Data views, Events, Documents, Reports, Panels and Panel items.

A range of actions can be triggered, including generating documents, auto creating events, selecting summary views, setting studies, showing messages, switching data views and running add ins.

Actions can be triggered when different **system events** occur, such as changing Data view, selecting a subject, moving into a panel or moving into an item.

Conditions can be defined so that the action is only carried out when certain criteria are met.

Actions are carried out in Data Entry when the specified system event occurs but only if any defined conditions are met.

Actions are set to mandatory by default. This means that the actions will occur in every Data View. They can be made to be non-mandatory, in which case it is possible to select which Data Views they should occur in.

The table on the following page shows which actions can be triggered by which system events.

Summary

An Action is executed

- i) when a system event occurs,
- ii) if any trigger conditions are met,
- iii) and if the action has been selected to trigger in the current Data view

Terminology

Action	a self-contained function that can be triggered by defined circumstances eg auto-create an event, display a message, generate a document, run an add-in.
System event	one of the standard InfoFlex functions that can be defined to trigger an action eg saving an event, deleting a subject, changing panel.
Trigger condition	the circumstances in which the action will be carried out eg whenever the system event happens, or when additional criteria are met

Table of actions available for each system event

Definition defined in	System Events	Actions							
		Show Message	Run Addin	Auto-create Event	Generate Document	Select Summary View	Set Studies	Switch Data view	Event Write Back
Domain	Select Data View	✓	✓						
	Deselect Data View	✓	✓						
	Select Subject	✓	✓						
	Deselect Subject	✓	✓						
	New Subject	✓	✓						
	Delete Subject	✓	✓						
Event	On New Event	✓	✓						
	On First Save Event	✓	✓	✓	✓	✓	✓	✓	✓
	On Save Event	✓	✓	✓	✓	✓	✓	✓	✓
	On Delete Event	✓	✓						
Document	On New Document	✓	✓						
	On First Save Document	✓	✓						✓
	On Save Document	✓	✓						✓
	On Delete Document	✓	✓						
Data Item	On Enter Data Item	✓	✓						
	On Exit Data Item	✓	✓						
Panel	On Enter Panel	✓	✓						
	On Exit Panel	✓	✓						

How to set up actions

Where to set up the Action

To set an action that will occur on of the following system events, the action needs to be added to the **Domain** Definition:

On Select Data View	When a Data view is selected
On Deselect Data View	When the current Data view is left for a different Data view
On Select Subject	When a subject is selected
On Deselect Subject	When the subject is changed for a different subject
On New Subject	When a new subject is created
On Delete Subject	When a subject is deleted

If an action is required on the following system events, the action should be defined on the **Event** definition:

On New Event	When an event is first created (before save)
On First Save Event	When an event is first saved
On Save Event	When an event is saved after the first save
On Delete Event	When an event is deleted

To set an action on one of the following system events, the action must be defined on a **Document** definition or **Report** definition:

On New Document	When a document is first generated (before save)
On First Save of Document	When a document is first saved
On Save of Document	When a document is saved after the first save
On Delete of Document	When a document is deleted

(**On Save** is not possible for Reports, as they cannot be edited after the first save).

To set an action on one of the following system events, the action must be defined on a **Data item**:

On Enter item	When the focus enters the panel item's box
On Exit item	When the focus leaves the panel item's box

To set an action on one of the following system events, the action must be defined on a **Panel** definition (note that this is the only definition in the Data view part of the design tree on which an Action can be defined).

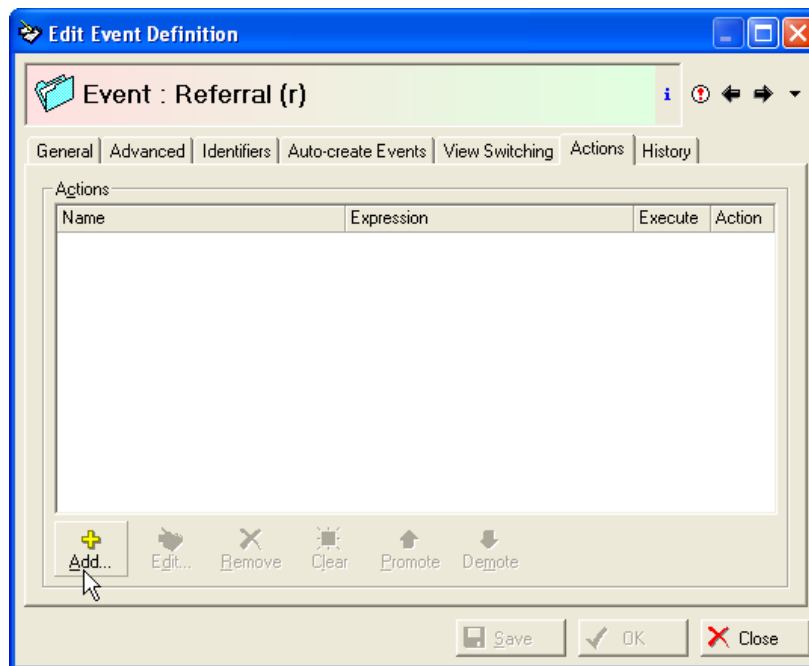
On Enter Panel	When focus goes into a panel
On Exit Panel	When focus leaves a panel

Adding the Action

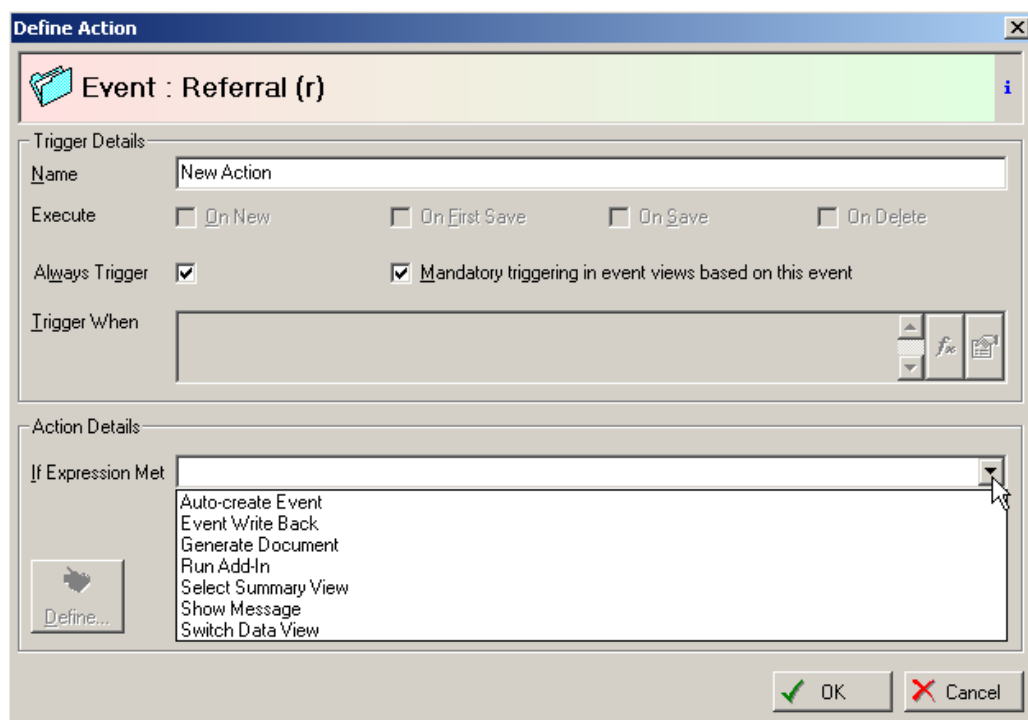
Select the Domain/Event/Document/Data item/Panel on which the Action will be created, and edit the definition. There will be an **Actions** tab in the **Edit Definition** Dialog.

For example, for an Event, go to the **Edit Event Definition** window and select the **Actions** tab.

Press the **Add** button.



The **Define Action** window will appear.



To Add an Action


1. First select the action to be carried out in the **If Expression met** drop down list. The contents of list will vary depending on the type of definition the Action is being added to.
2. Give the action a **Name**.
3. **Execute**: Select which system event will trigger the action to execute. (**On New**, **On First Save**, **On save**, or **On Delete**).
4. **Always Trigger/Trigger When**: If the action should happen every time the system event occurs, then leave the **Always Trigger** box ticked. If the action should only occur if certain other conditions are met (e.g. the subject has particular values in some data item), then untick the **Always Trigger** box and add a trigger condition using the expression builder in the **Trigger When** panel. The action will only occur when the expression is true.
5. Choose whether the action will be set to **Mandatory triggering in data views** (i.e. happens in every data view), or not mandatory (can be switched off or on in different Data views).
6. Select the **Define** button and set the details of the action. (See below for details).

Action Types

Show Message

The action can be to display a message to the user. The type of message can be set as Information, Warning or Critical and the text of the message can be edited.

Run Add-In

Add-Ins that are set up in Data Entry can be set as actions. The Add-In can be configured by editing the dialog from the  button.

Set Studies

This action enables the event (or document) that the action is defined on to be assigned to selected studies. Child events will also be assigned to the studies. The event (or document) can also be removed from selected studies. Note this action is only available if studies have been defined in the domain.

Auto-Create Event

New events can be created using the Auto-create event action. This action can also be set on the Auto Create Event tab. Auto-create actions will appear on both the Actions tab and the Auto-Create Event tab, whichever tab they were set up from.

Switch Data View

The current Data view can be changed to a different Data view. This action can also be set on the View Switching tab. View-Switching actions will appear on both the Actions tab and the View-Switching tab, whichever tab they were set up from.

Select Summary View

Data Entry can switch to show a Summary View. The Summary View selected must be set up on the current Data View.

Generate Document

Documents that are attached to the event can be generated.

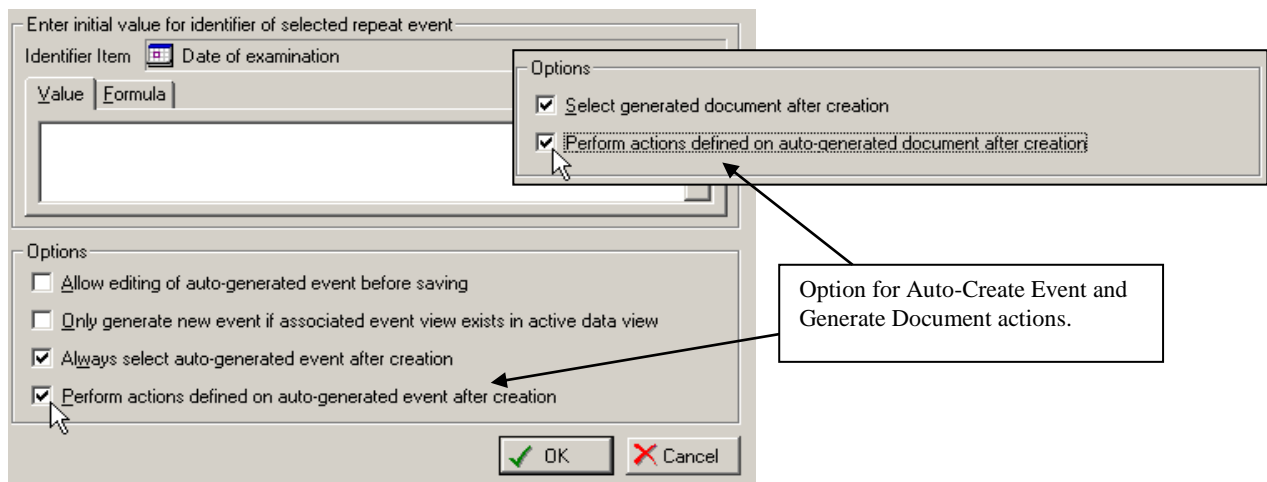
Event Write Back

Data from the triggering event can be written to a specified target event.

Performing actions on auto-generated events and documents

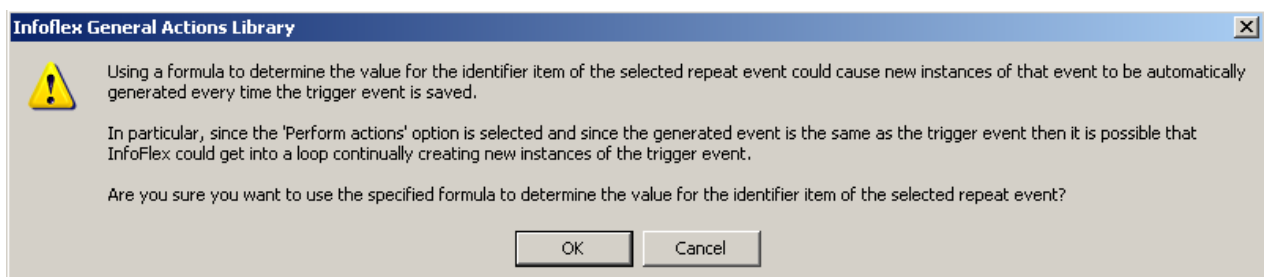
Actions can be carried out on events and documents that are themselves auto-generated. These actions can include the event write back and set study flag actions. They can even include actions to auto-generate further events and document, which, in turn, will have their defined actions performed too.

The option **Perform actions defined on auto-generated event/document** after creation is available in the action details for Generate Document and Auto-Creat Event action definitions. By default the option is switched off. It must be switched on in each action definition if actions are required to be carried out in the auto-generated event or document. If a sequence of events is being generated, the option must be switched on in the action definition of each event that is being generated.



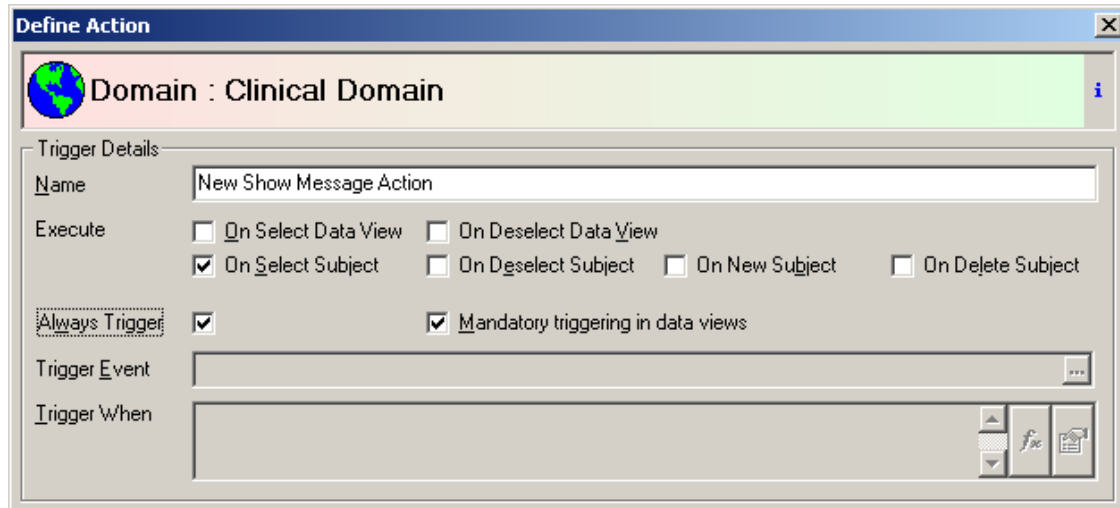
Note that only actions set to generate **On First Save** of the generated event or document can be carried out.

Note also that it is possible for a repeat event to have an action defined to auto-generate another instance of the same event. It is therefore possible for Data Entry to get into an infinite loop continually auto-generating new instances of the event. Therefore if an action is defined to create another instance of the same event and a formula is used to determine the value of the identifier, an additional warning message will be displayed.

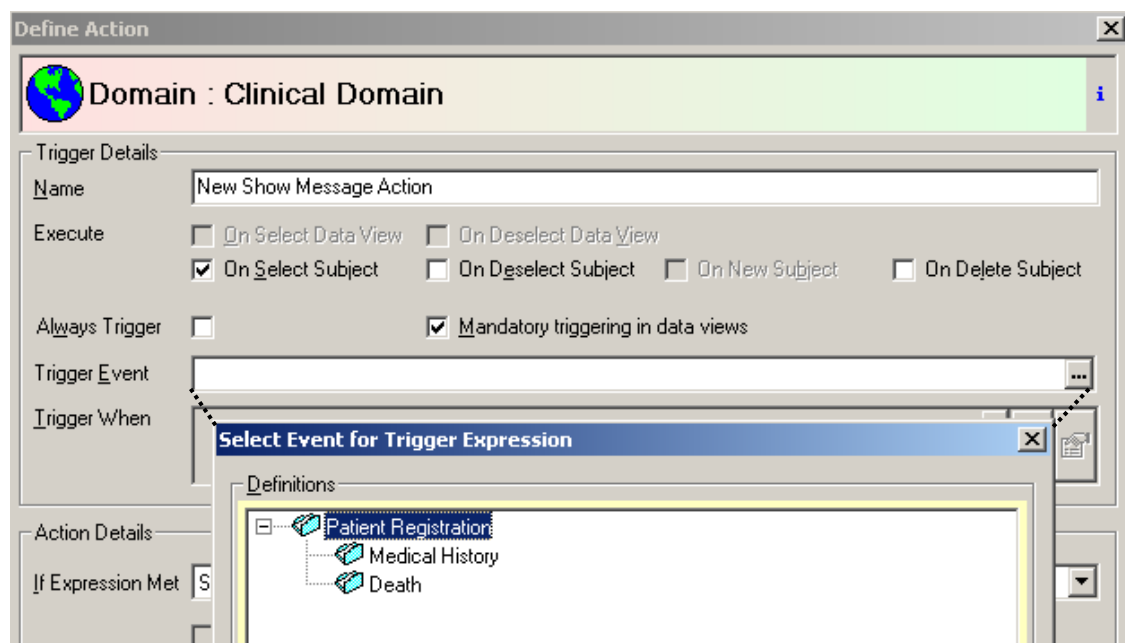


Setting “Trigger when” conditions for domain subject actions

When defining actions at domain level it is necessary to define trigger conditions for **On Select Subject**, **On Deselect Subject** and **On Delete Subject** actions. For example, you may wish to display a message to the user when a patient that is selected is deceased.



For these actions when defining a trigger condition, you must first choose a **Trigger Event**. This is the event that contains the data item you wish to use in the condition. The condition expressions for these subject triggers can only use data items from non-repeat events that do not have a repeat event in their ancestry. If you want to use data items from more than one non-repeat event, you must choose the lowest event in the branch. Only valid non-repeat events are displayed in the selection dialog that appears when you click in the **Trigger Event** field.



Once you have selected a trigger event, create a formula in the **Trigger When** box as normal, using any items in the event you have selected and its parent event(s).

The 'Define Action' dialog box is shown for the 'Clinical Domain'. It contains the following fields and options:

- Domain :** Clinical Domain
- Trigger Details:**
 - Name:** New Show Message Action
 - Execute:**
 - ☐ On Select Data View
 - ☐ On Deselect Data View
 - ☒ On Select Subject
 - ☐ On Deselect Subject
 - ☐ On New Subject
 - ☐ On Delete Subject
 - Always Trigger:** ☐ (unchecked)
 - Mandatory triggering in data views:** ☒ (checked)
 - Trigger Event:** Medical History
 - Trigger When:** [Has MRSA] = 1

Note that when defining domain level actions, if you switch off **Always Trigger**, then the **On Select Data View**, **On Deselect Data View** and **On New Subject** triggers are disabled since conditions cannot be defined for those triggers.

This screenshot shows the 'Define Action' dialog box with the 'Always Trigger' checkbox unchecked. A text box with arrows pointing to the disabled trigger options states: 'These triggers are disabled if Always trigger is switched off.'

The 'Execute' section shows the following disabled options:

- ☐ On Select Data View
- ☐ On Deselect Data View
- ☐ On Select Subject
- ☐ On Deselect Subject
- ☐ On New Subject
- ☐ On Delete Subject

The 'Always Trigger' checkbox is unchecked, and the 'Mandatory triggering in data views' checkbox is checked.

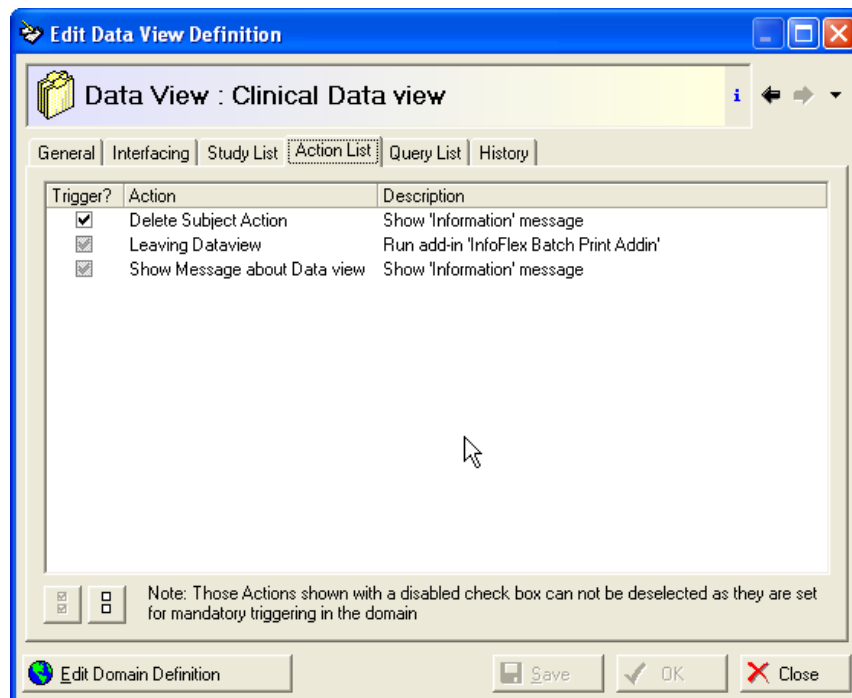
Mandatory and non mandatory actions

Actions are set to occur as mandatory by default. Actions will therefore be carried out on every Data view, Event view or Panel item connected to the domain where the action has been set.

- ☒ Mandatory triggering in data views
- ☒ Mandatory triggering in event views based on this event
- ☒ Mandatory triggering in document views based on this document
- ☒ Mandatory triggering in panel items based on this data item

However, if the mandatory check box is unticked, then the action does not have to occur in every Data view. The user can choose which Data views they occur in.

Viewing definitions (Data views, Document Views, Report Views, Event Views, Panel items) all contain a tab called **Action List**, which lists the actions that are set on the definition they are linked to. Actions can be switched on or off in the **Trigger?** checkbox to the left of the action name. If the action is mandatory, it will not be possible to deselect the action. Non-mandatory actions are switched off by default. In this case, for each non-mandatory action that is defined, the user must go to the viewing definition in each data view, and switch it on.

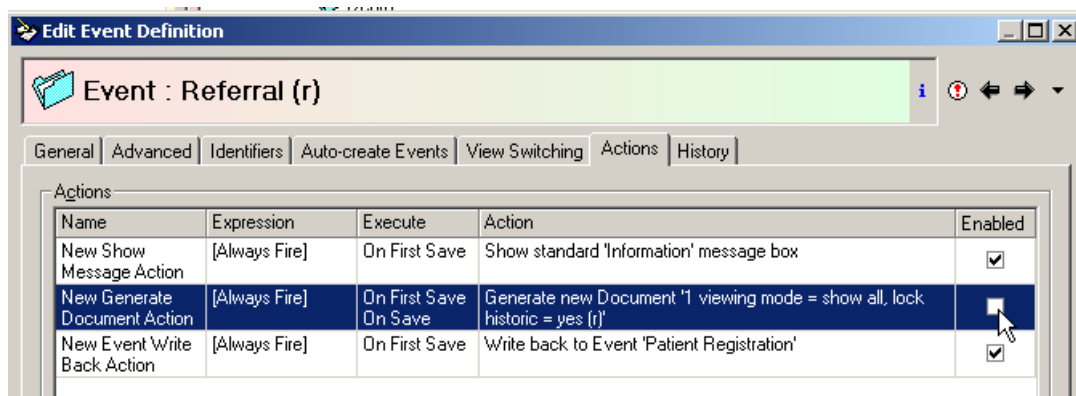


Enabled and Disabled actions

Once defined, actions can be enabled and disabled. The **Enabled** property over-rides the settings described in the **Mandatory and non mandatory actions** section above.

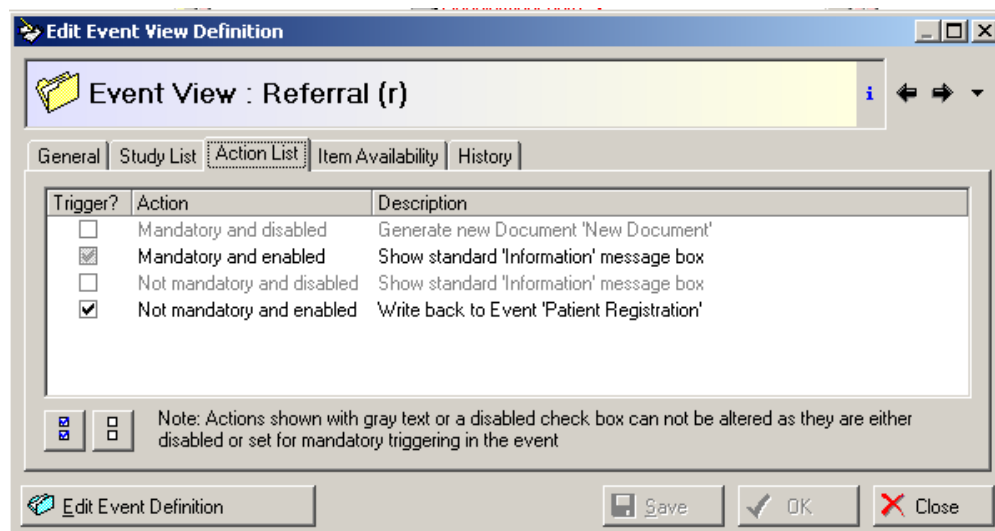
By default actions are enabled which means they will be carried out in all data views where they are mandatory or have been switched on. When disabled, an action will not be carried out in any data view, regardless of the mandatory settings.

Actions can be enabled or disabled using the check box on the Actions tab in the Domain, Event, Item or Document definition.



All actions whether enabled or disabled are still listed on the **Action List** tab of relevant definition in the data view. Enabled actions must still be switched on in the relevant data view definition where they have not been made mandatory in the relevant domain definition. The **Action List** tab displays actions as follows:

- Actions are displayed in black text when they are enabled and in grey text when they are disabled.
- A tick in the Trigger? check box indicates that the action will be executed.
- The **Trigger?** check box is enabled (and the action can be switched on or off) where in the event definition the action is both enabled and **Mandatory triggering in event views based on this event** is disabled. The **Trigger?** check box can only be enabled if an action is enabled.
- The **Trigger?** check box displays a disabled tick when the action is mandatory and enabled.



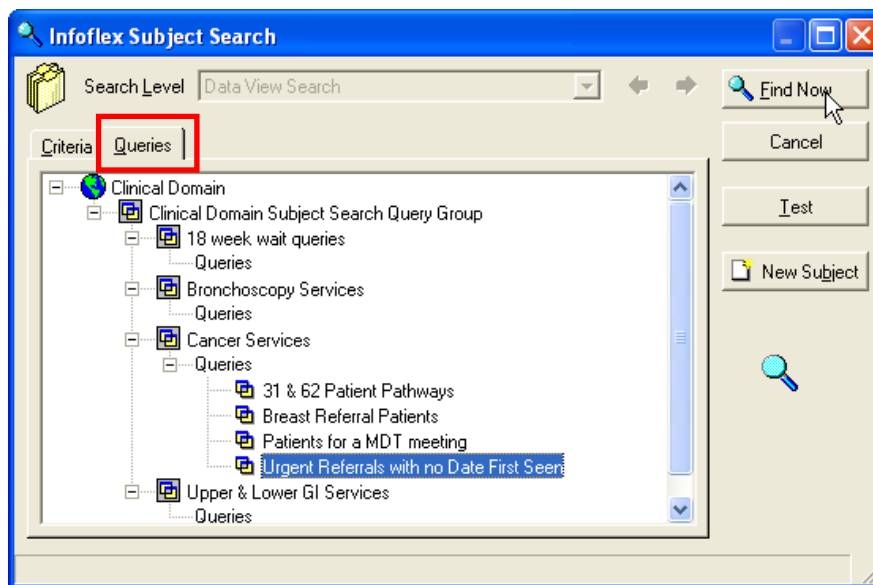
APPENDIX 4 – SUBJECT SEARCH QUERIES

Subject search queries can be defined to allow Data Entry users to search for groups of subjects that all satisfy a set of criteria. The groups of subjects are defined using a Query.

Some examples of groups of subjects the user may need to search for are: all the patients for an MDT meeting; all the patients belonging to a particular consultant; the patient list for a clinic; all patients that have no decision to treat date; all females between 18 and 65 who have had a referral in the last year, etc.

Subject Search Queries are set up in Design Management. They are defined as queries on the Domain. Individual data views can be configured to use one or more of the subject search queries that have been defined in the domain.

When the user performs a subject search in Data Entry, they have the choice of running the subject search queries instead of searching using the standard search criteria, as shown below.



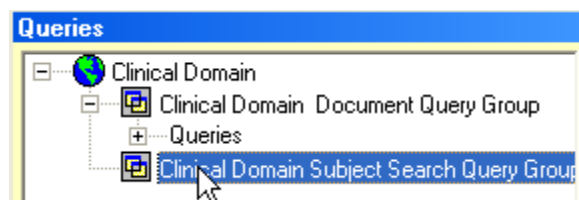
Note that users who wish to define Subject Search Queries for use in Data Entry should be trained in Query Design Manager before continuing.

Defining Subject Search Queries

In the Design Management module, ensure that the Domain is selected then open the Query Design Manager from the **Actions** menu

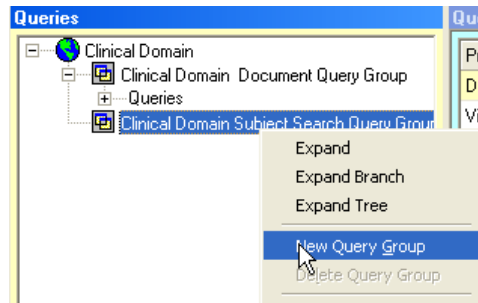
Build The Query

The Subject Search Queries should be defined in the Subject Search Query Group which exists by default attached to the domain. Queries defined in the Document Query Group are not available to be used as subject search queries.



We recommend creating a series of query groups within the Subject Search Query Group and giving careful thought to the naming of the queries, since queries relating to all data views will be created within the Subject Search Query Group.

Add Query Groups and Queries using the right-button context menu in the same way as for Document Queries.



Build the Query in the normal way. The Query View should contain those data items which will be displayed in the results grid as a result of the Subject Search.

Unsuitable Queries

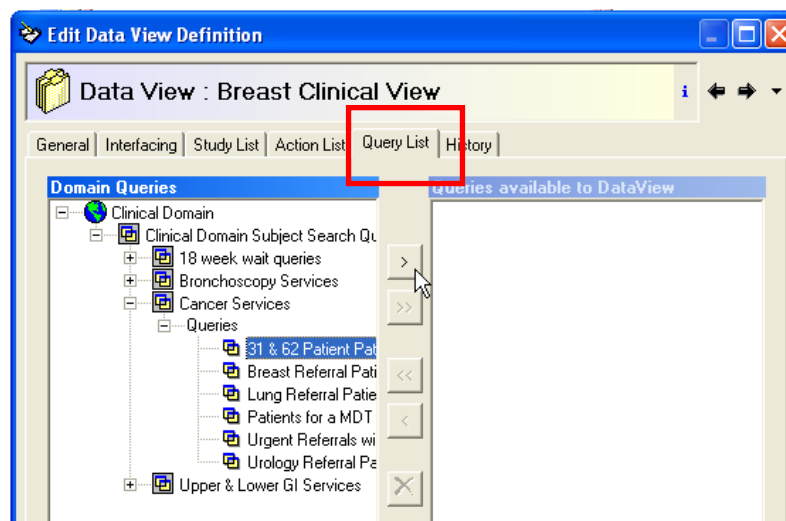
Note that certain types of query are not suitable for a Subject Search Query: Counts, and aggregated results (e.g. min, max, avg, sum) are not suitable as a Subject Search Query. The Query View should not contain a tick in the 'Group By' checkbox or a Count.

Assign the Query to the Data View

Once you have built and tested your queries, close Query Design Manager. The Subject Search Queries now need to be assigned to Data Views.

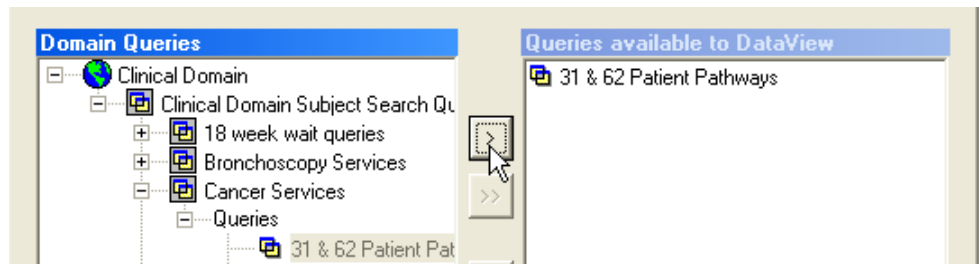
Display the Data View in which the Subject Search queries are needed and edit the Data View Definition.

The Data View definition has a tab called **Query List**. This tab allows you to select the Subject Search Queries that are applicable to the Data View.



The left hand side contains all the Subject Search Queries in the Domain. The right hand side shows the queries that are available to the Data View and therefore available in Data Entry.

To make a query available in the data view, select it on the left hand side and use the arrow button to make it available on the right hand side.



Adds the last query selected in the **Domain Queries** box on the left to the **Queries available to DataView** box on the right.



Adds all the queries that are selected in the **Domain Queries** box on the left to the **Queries available to DataView** box on the right.



Removes all the selected queries from the **Queries available to DataView** box on the right.



Removes the last selected query from the **Queries available to DataView** box on the right.

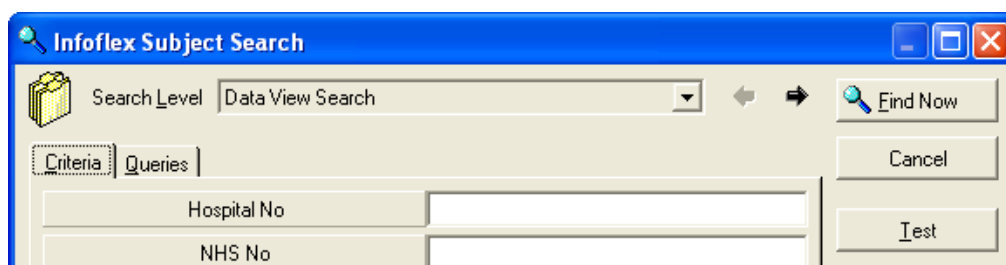


This button removes **all** the queries from the **Queries available to DataView** box on the right.

Press **Save** or **OK** to save the selection.

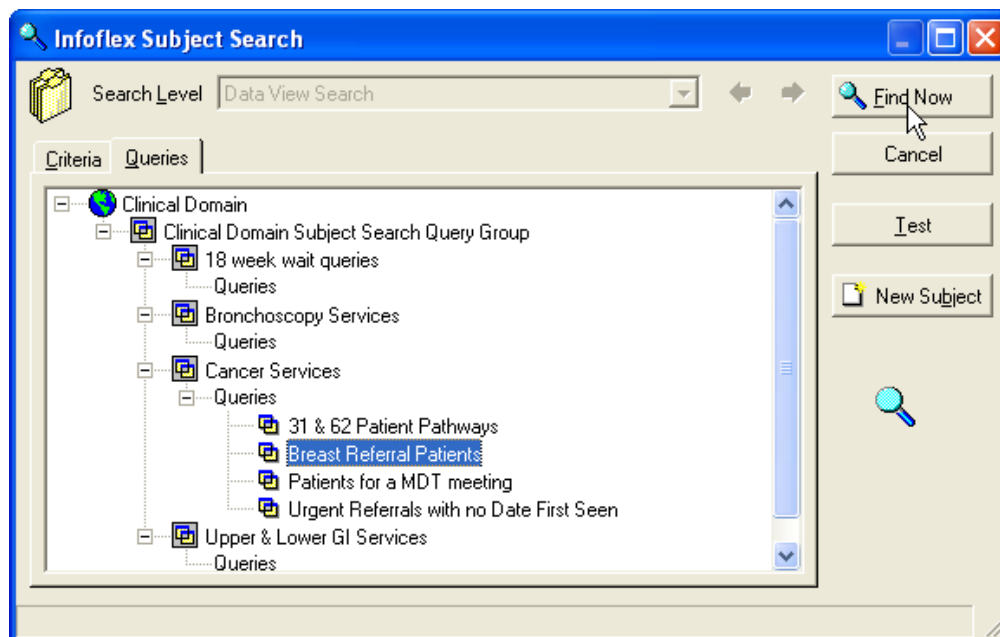
Using Subject Search Queries

In Data Entry, the Subject Search Queries are run from the InfoFlex Subject Search dialog. If there are Subject Search Queries defined then the **Queries** tab will not be enabled.

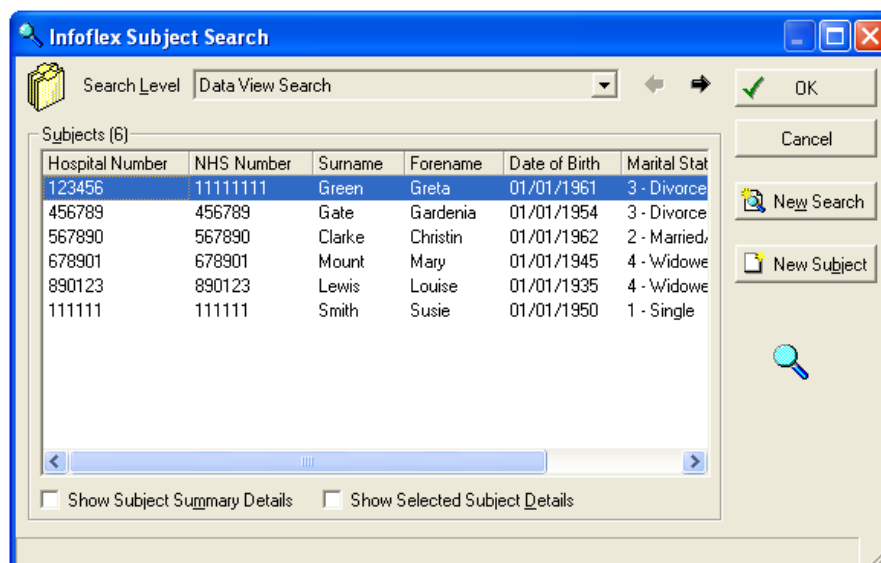


Select the **Queries** tab to display the available Subject Search Queries. Although the user will see all the Query groups, they will only see the Queries that have been made available for this Data View.

To run a Subject Search Query, select the Query from the list and then press the **Find Now** button.



The subjects that satisfy this query will be shown in the grid as normal.



APPENDIX 5 – INTRODUCTION TO PANEL LAYOUTS

It is possible to define the layout of panels in terms of position, size, colour and font of labels, data entry boxes and backgrounds.

It is also possible to display panels from the same or parent events on a panel for reference purposes.

If you would like to make use of the functionality described in this Appendix, please ask for the separate **Screen Designer User Guide**.

Examples

Here are some examples of panel layouts:

The screenshot shows a software interface titled "Definitive Diagnosis & Treatment Details". It features a "Diagnosis" field with the text "C18 - Malignant neoplasm of colon". Below this are two date fields: "Decision to Treat (non cancer)" with the value "01/01/2000" and "Treatment Date (non cancer)" which is empty. A section titled "18 Week Pathway Dates Summary" contains a table with the following data:

	Referral Received Date (Start Date)	Date First Seen (28 days)	Date of Decision to Treat (88 days)	Date of Treatment (126 days)
Target Date		01/01/2000	01/01/2000	01/01/2000
Actual Date	01/01/2000	01/01/2000	01/01/2000	
Days to Target				091 Days
Variance		001 Days	-010 Days	

Below the table is a note: "[NB: +ve = more days than target, -ve = less days than target]". At the bottom, a "Pathway Targets" diagram shows a timeline from "Referral Received Date" to "Definitive Treatment Date" with a red double-headed arrow indicating a duration of "18 weeks". The timeline is divided into stages: "Referral Received Date", "OPA", "Investigations", "Diagnosis & Decision to Treat", and "Definitive Treatment Date".

The screenshot shows a software interface titled "Upper GI - Further Procedures". It contains a section "Diagnosis and Other Procedures" with a grid of procedure names, each followed by a checkbox:

Gastrostomy Insertion (PEG)	Desophageal Dilatation	Bx Urease Test
Variceal Sclerosis	Variceal Banding	Pyloric Dilatation
Stent Insertion		

Screens Grid Save

Referral & Date First Seen Details

» Source of Referral * 03 - Referral from General Medical Practitioner

Cancer Referral Decision Date * 01/01/2000

Dummy Referral Request Received Date Referral Has Been Reviewed

Referral Request Received Date * 10/11/2000 Age at Referral

» Cancer Referral Priority Type *

» Urgent Cancer Referral Type *

Date First Seen * 13/12/2000

Organisation Code (provider first seen)*

Consultant First Seen

Decision to Refer to Receipt of Referral 313 days

Suspension periods to remove from Waiting Times

	Start of Suspension	End of Suspension	Total days	Adjustment Reason
1st	12/12/2000	13/12/2000	001 days	
2nd	12/12/2000	13/12/2000	001 days	
3rd	12/12/2000	13/12/2000	001 days	
4th	12/12/2000	13/12/2000	001 days	
5th	12/12/2000	13/12/2000	001 days	

Waiting Time Adjustment (First Seen) 005 days

Waiting Time Adj Reason (First Seen)*

Non Adjusted Waiting Time Decision to Refer to Date first Seen 346 days

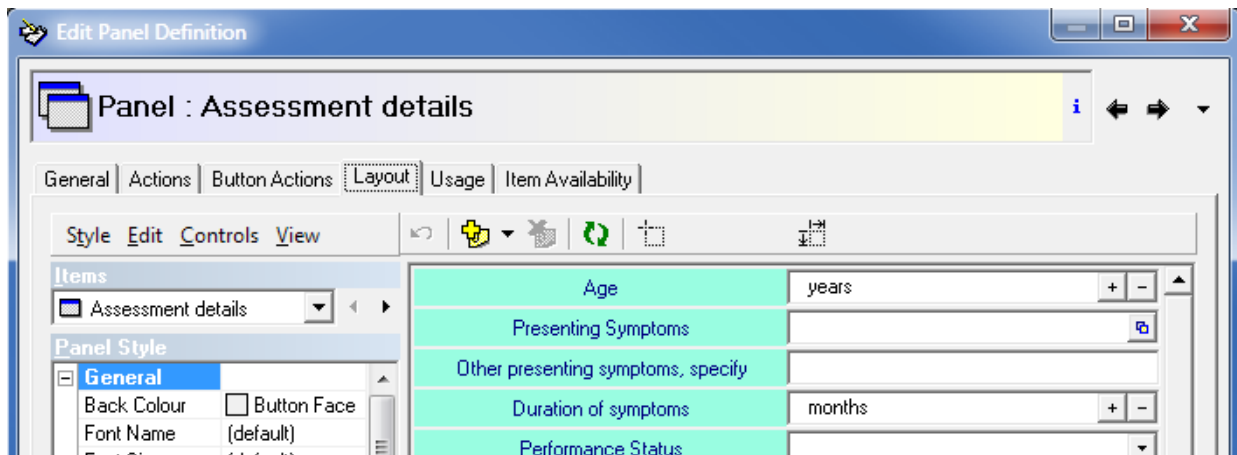
Adjusted Waiting Time Decision to Refer to Date first Seen 341 days

Delay Reason Comment (First seen)*

Delay Reason Refer To First Seen(Cancer)*

Overview

The panel layout is defined on the **Layout** tab of the Panel definition.



If no item is selected, you can set panel properties for the whole panel. The properties relate variously to the panel background or to the default display of items.

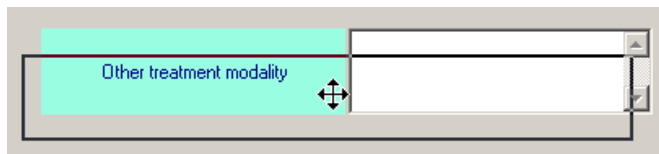
Panel Style	
General	
Back Colour	<input type="checkbox"/> Button Face
Font Name	(default)
Font Size	(default)
Offset	2
Spacing	2
Edit	
Edit Back Colour	<input type="checkbox"/> Window Backgro
Edit Border Style	2 - 3D
Edit Font Style	0 - Normal
Edit Fore Colour	<input type="checkbox"/> Window Text
Read Only Back Col	<input type="checkbox"/> Button Face
Read Only Fore Colo	<input type="checkbox"/> Button Text
Label	
Label Alignment	7 - Centre Middle
Label Back Colour	<input type="checkbox"/> IFX Label Back C
Label Border Style	0 - None
Label Font Style	0 - Normal
Label Fore Colour	<input type="checkbox"/> Navy
Label Position	0 - Left
Label Size	50
Label Size Type	1 - Percentage
Label Transparent	False
Label Wrapped	False
Button	
Button Appearance	1 - 3D
Button Back Colour	<input type="checkbox"/> Button Face
Picture	
Picture File	(None)
Picture Width	0
Picture Height	0
Controls	
Control Alignment	0 - Left
Control Auto Size	False

Τησε προπερτιες ρελατε το αλλ ιτεμο
ωηοσε χορρεσπονδινγ ινδιπιδουαλ προ
περτιες αρε σετ το ☐δεφαυλτ.

If you select an item, you can set properties relating to the display of that item.

Panel Item Style	
General	
Label	Performance Status
Position	
Left	(default)
Top	(default)
Width	(default)
Height	(default)
Edit	
Edit Back Colour	(default)
Edit Border Style	(default)
Edit Font Style	(default)
Edit Fore Colour	(default)
Label	
Label Alignment	(default)
Label Back Colour	(default)
Label Border Style	(default)
Label Font Style	(default)
Label Fore Colour	(default)
Label Position	(default)
Label Size	(default)
Label Size Type	(default)
Label Transparent	(default)
Label Wrapped	(default)
Button	
Button Appearance	(default)
Button Back Colour	(default)

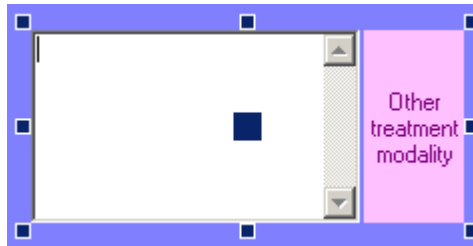
Note that you can also set the position of items by dragging and dropping,



and you can set the size by resizing using the handles.

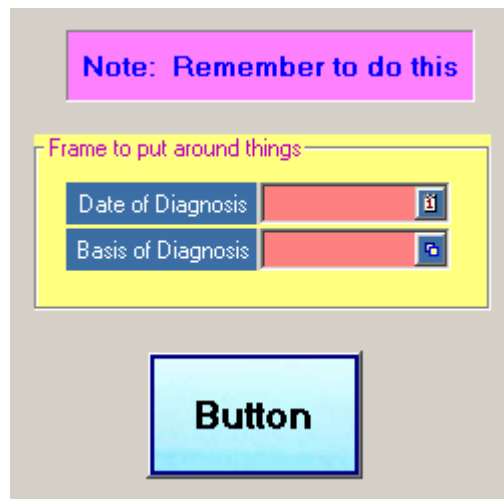
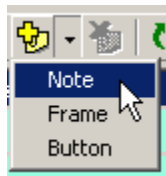


Note that you can adjust the relative size of the label by using the Label Size type property. Selecting **None** in this property removes the label altogether. You can also adjust the position of the label using the **Label Position** property.



Notes, Frames and Buttons

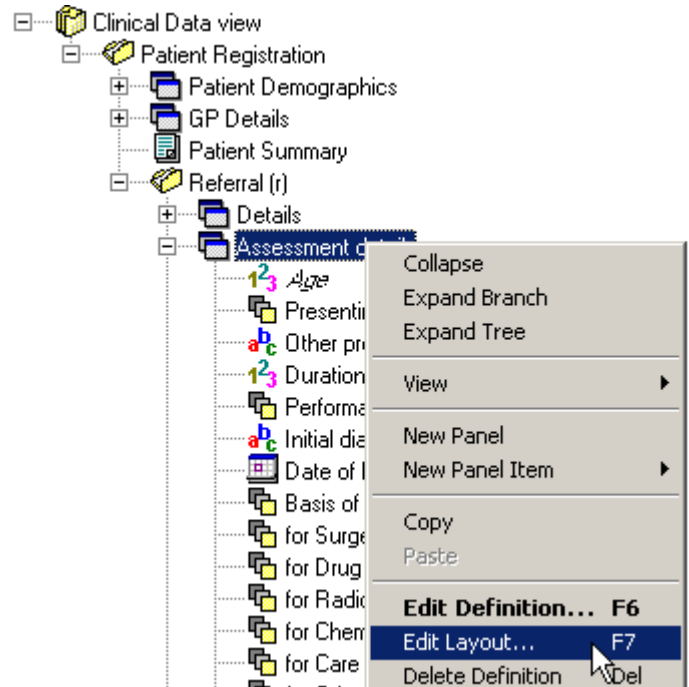
You can add notes, frames and buttons to the layout and you can also define actions to be carried out on pressing a button (see below).



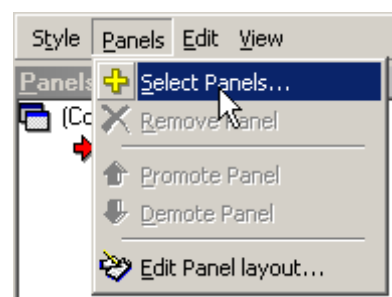
Container Screens

You can add additional panels to a panel (for reference purposes). You can add panels from the same event or a parent event. Any panels that you add are read only. For full details of this functionality see the separate **Screen Designer Tutorial** document.

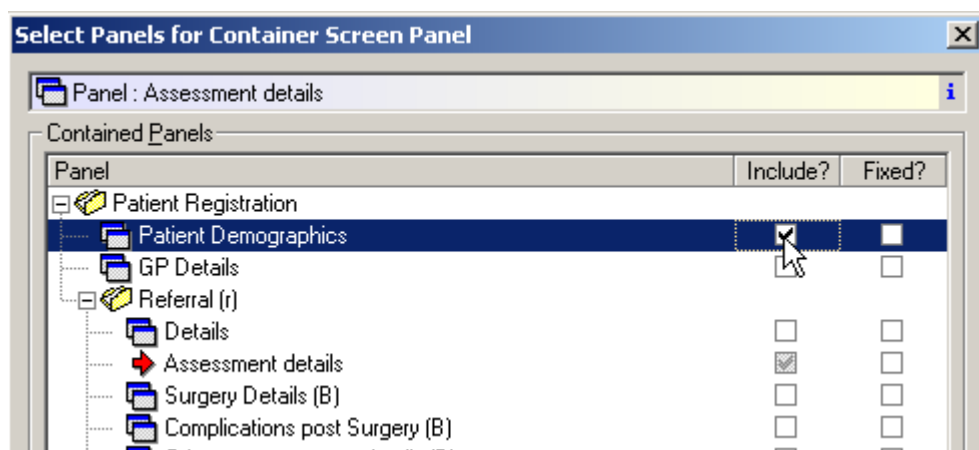
Right click the panel you wish to add panels to and select **Edit Layout...**



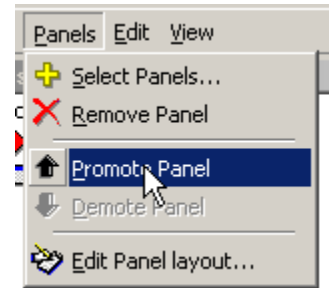
Go to the **Panels** menu and choose **Select Panels...**



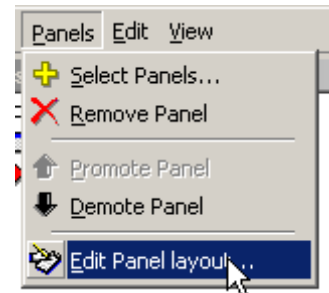
Place a tick in the **Include?** column for those additional panels that you wish to see in your panel.



The panels are added underneath the existing panel. You can move them around manually, or you can go to the Panels menu and Promote or Demote the panels to adjust the order.



You can edit the layout of each panel individually by choosing **Edit Panel layout** from the **Panels** menu. Note that when you edit a panel layout it applies to all instances of that panel throughout the design.



Panel Button Actions

It is possible to create buttons and to assign one or more actions to be performed when the buttons are pressed. For full details of this functionality please see the separate **Panel Button Actions** document.

The actions available for panel button are as follows:

Auto create event	Generates a specified event
Branch From Panel Item	Attempts to branch from a selected branching panel item
Event Write Back	Writes data back to a specified event.
Generate Document	Generates a specified document
Go To Screen	Navigates to a selected container screen panel (not including branching only panels), or to first, last, previous or next screen
Hyperlink	Opens a specified file or web page
Run Add-In	Runs a selected Add-In
Save Event	Saves the event
Select Summary View	Selects a summary view (Data Entry and Work list modal dialog only)
Set Panel Item Values	Sets the value of one or more selected panel item to a predefined value
Show Message	Shows a predefined message to the user
Switch Data View	Switches to a different data view (Data Entry only)

To create a panel button action, you must first create the button on the **Layout** tab of the panel definition as described above.

You should then define the actions you wish to associate with the button on the **Button Actions** tab of the panel definition.

You can define several actions all carried out using the same button. (For example you might wish the button to display a confirmation message, add a data to a branching item, and then go to the branching screen). For full details please see the separate **Panel Button Actions** document.